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USAID/ROCAP  
Health and Nutrition Strategy  
for Central America, Panama and Belize

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Executive Summary

Background

ROCAP has historically played a key role in health and nutrition in the subregion. It has provided substantial support to the Nutrition Institute of Central America and Panama (INCAP), the internationally-respected regional training, research and technical center. INCAP provides support to host country governments, PVOs, private sector health professionals and other multilateral and bilateral donor programs in health and nutrition.

The subregional analysis and five-year strategy presented here is based on a detailed review of subregional information, sector trends, constraints and actions specific to each country in the subregion. Donor and bilateral mission activities, plans and recommendations were also included. It is consistent with Agency Health Policy, Health Strategy, Nutrition Strategy and Child Survival Strategy. It also complements IAC Bureau's Management Objectives for Health and Nutrition, IAC Bureau Nutrition Strategy and the outline for IAC Country Child Survival Strategies and bilateral mission health sector strategies. IAC Bureau CAI objectives in health and nutrition are:

- to improve health and health services
- to reduce infant and child mortality

Subregional Trends in Health and Nutrition

A. Morbidity, Mortality and Life Expectancy

Mortality and morbidity rates from infectious disease have declined steadily throughout the subregion over the past several decades. However, infant mortality rates continue to be over Agency standard (75 per 1,000 live births) in Honduras and Guatemala, and child mortality continues to exceed the Agency standard (10 per 1,000 children 1-5 years of age) in Guatemala. Life expectancy has increased steadily over the past several decades throughout the subregion. All countries are above the Agency standard for life expectancy of 50 years. Another positive change has been the transition in Costa Rica, Panama and Belize from a disease pattern caused by infectious disease to one more closely resembling that of the developed world.

Principal causes of illness and death among high risk populations throughout the subregion are: 1) infectious diseases (respiratory and diarrheal) complicated by undernutrition, 2) problems occurring during the perinatal period, and 3) immunizable diseases (especially measles and whooping cough).

Countries in this area have expressed concern for high risk populations, particularly, those in the rural or marginal urban areas and the displaced and refugees. Among these, rates of mortality, morbidity and undernutrition are much higher than national averages. Some countries have also reported recent indications that the mortality and morbidity status of young children has been negatively affected by the economic crisis and socio-political conflict which has affected the subregion over the past decade.

#### B. Undernutrition

The only trend data available on the nutritional status of young children is from Guatemala, Costa Rica and Panama. According to this data, the nutritional status of this group has improved in Costa Rica over the past 16 years. However, there has been a decline in the nutritional status of this age group over the past 10 years in Guatemala and Panama. A comparison of nutritional status indicators with Agency standards (less than 20% of young children with chronic and severe undernourishment), shows Honduran, Guatemalan and Panamanian children to have serious nutritional deficiencies.

Food insecurity on the household level is a major cause of undernutrition, and a serious concern for most countries in the subregion. The percentage of the population estimated to be consuming the recommended level of calories ranges from 66% in Costa Rica to 31% in Guatemala. Calorie consumption, then, is below Agency standards of 90% of the population in all countries.

#### C. Population Growth, Composition and Movements

Although birth and death rates have consistently declined over the past several decades, the population growth rate has remained high at 2.7%. Children under 15 years of age make up 45% of the population of the subregion.

Three major population movements have taken place over this time: urban migration, population displacement, and migration of refugees. At the present time, 44% of the total population in the subregion is urban, much of it located in marginal urban areas with low health sector

coverage. Estimates of the number of displaced (internal refugees) range from 610,000 to 1,050,000, with the largest number in El Salvador. Studies of the displaced in El Salvador have shown this group to have morbidity and mortality rates which are much higher than average. The most recent estimate of the number of refugees in the subregion is 277,500, and is growing.

#### Major Constraints

- o Economic contraction which lowers public health expenditures and places stress on the household level (reducing household ability to purchase or produce food and acquire health services).
- o Weaknesses in public and private health sector service delivery:
  - Insufficient or inadequate resources (infrastructure, equipment human resources);
  - Inadequate national and subregional policy formulation and planning (especially in essential drugs and other critical supplies);
  - Inadequate coordination on national and subregional levels (among service providers, donors and within public health services);
  - Inappropriate resource use and allocation (low coverage of high risk populations in rural and marginal urban areas);
  - Deficiencies in the area of human resources (physician-based, inappropriate training and education which precludes: training in nutrition and infectious disease, primary health care, prevention and public health);
  - Overcentralization;
  - Inappropriate or deficient program emphasis (not focused sufficiently on local needs, high-risk populations, primary health care or prevention);
  - Weaknesses in management (deficiencies in management training and experience);
  - Deficient information systems (not used for planning, implementation, monitoring or evaluation), and inadequate surveillance systems;

- Deficiencies in technical knowledge (biomedical, socio-economic, cultural) on which to base planning, implementation and case management of common health problems;
- Insufficiencies in essential drugs and supplies (high cost of importing, logistics system problems, lack of quality control).
- o Socio-political conflict, causing:
  - High risk populations to be cut off from health services;
  - Destruction and closing of facilities;
  - Massive population movements and creation of new high risk populations - refugees and the displaced.
- o Constraints to access and utilization of health services:
  - Geographical and climatic barriers (remote mountain or jungle terrain, rainy season);
  - Decreased resources at the household level (due to economic constriction, inflation, increased unemployment), which constrains household expenditures on food and use of health services;
  - Diversity of ethnic groups, languages and cultures in the subregion.
- o Other underlying constraints:
  - Deficiencies in sanitation and potable water;
  - Increases in household food insecurity;
  - Low literacy levels;
  - High population growth, causing inadequate birth spacing and high risk births.

#### Major Donors Active in the Subregion

Major donors include WHO/PAHO and its donor countries and institutions, including CEE/Italy, the U.S., Holland, Chile, Belgium, West Germany, Spain, France, Canada, Japan, OAS, Kellogg Foundation, IDB, and Rockefeller; UNICEF and its donor countries including EEC/Italy, Canada,

Norway, the Netherlands, France, Belgium, Japan, Sweden, the U.S., the U.K, and OPEC; the UN World Food Program and USAID (Bilateral missions, ROCAP, and centrally-funded projects).

Gaps Identified in the Health and Nutrition Portfolio which are  
Appropriate Areas for ROCAP Involvement

As part of the analysis of subregional health sector activities, a number of areas were identified as appropriate for ROCAP involvement. These included new areas, based on gaps in existing programs, current donor activities and other constraints. They also included areas of activity in which ROCAP currently is, and will continue to be, involved.

1. Activities in the following technical content areas:
  - a. diarrheal disease;
  - b. acute respiratory infections;
  - c. undernutrition;
  - d. perinatal problems;
  - e. immunizable diseases;
  - f. malaria;
  - g. AIDS.
2. Focused on the following groups:
  - a. children under 5 years of age;
  - b. pregnant/lactating women;
  - c. other high risk populations including low income groups, the displaced, and schoolchildren.
3. Strengthening the health/nutrition sector through:
  - a. policy development, planning and coordination;
  - b. improved coverage of low risk groups, primary health care, preventive health services and outreach;
  - c. training and education:
    1. public health education;
    2. management training/health care financing;
    3. community education/ mass media;
  - d. scientific and technical support:
    1. information, monitoring and surveillance;
    2. applied and operations research;

3. technical knowledge specific to diseases in the subregion;

e. essential drugs/quality control.

Plan of Action

Based on the preceeding analysis, the following content and project areas will be considered of highest priority for ROCAP during the next five years:

A. Technical Support to Maternal-Child Health and Food and Nutrition Programs

As INCAP is an internationally-respected regional food and nutrition institute with proven capabilities and current directions which closely match the areas identified above in the gap analysis, ROCAP will continue to support INCAP over the next five years as follows:

1. Maternal-child health

Continue support for strengthening scientific and technical assistance to the public sector for MCH programs and the private sector (pharmacies, PVOs) through: a) monitoring and surveillance, b) applied and operations research, c) technical support in biomedical, cultural and socio-economic areas affecting program planning, program implementation and case management of common diseases, d) public health education and training, and e) coordination in policy and program development, planning and implementation.

2. Food and nutrition

Continue support for strengthening scientific and technical assistance to food and nutrition (public and private) activities through: a) continued assistance to and coordination with institutions and donors in policy formation, planning, program development, implementation and evaluation, b) support to determine the nature and extent of household food insecurity, and to develop subregional surveillance and national consumption/nutrition monitoring mechanisms, c) applied and operations research and policy analysis, d) training in food and nutrition, dissemination of information, expansion of the technical support network (food needs assessments, monitoring and surveillance, food production disincentive analyses, coordination of food assistance resources, improving program management and evaluation of the effects of policies and development programs on food and nutritional status and household food insecurity).



### 3. Institutional strengthening

While maintaining the technical focus of support for MCH and food and nutrition programs, ROCAP will also strengthen INCAP's capacity in information systems, monitoring, evaluation and surveillance; policy analysis; operations and applied research; and adaptation of new education and communications methods and techniques. This will be done through long and short-term training, provision of specialized consultants to the Institute, and by facilitating linkages with U.S. universities and institutions of technical excellence. ROCAP will also fund essential technical equipment and infrastructure, and assist in exploration of a more diverse and secure financial base.

#### B. Health Management and Administration Training

Most health professionals in administrative positions in the health sector lack training or previous experience in management or administration. The bilateral missions have public health sector strengthening projects working in management and administration. However, training in this area is provided on a short-term, project-specific basis and will not provide the subregion with a long-term, institutionalized capacity for training in health sector management or administration. Currently there is no subregional or national institution capable of providing such training, nor is there a common strategy to address the managerial sustainability problem. ROCAP, therefore, proposes to explore alternatives to meeting health sector management needs and to design long-term solutions.

#### Implications for the ROCAP Portfolio

##### A. Plan A Activities

##### 1. Project I: Technical Support to Maternal-Child Health and Food and Nutrition Programs

This will be a major 12 million dollar follow-on project with INCAP starting early in FY 91 and extending through FY 95. The project will continue to strengthen and complement national and bilateral policies, planning and coordination, surveillance, program implementation, public health education, and operations research. It will also strengthen INCAP's human resource base and technical skills in information systems, monitoring and evaluation and epidemiological surveillance, applied and operations research, education and communications methods, and public health education.

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This institutional strengthening will be accomplished through training, technical assistance and linkages with universities and other internationally-recognized technical institutions. The project will also provide some infrastructure support, mainly for equipment, and assist in finding ways to broaden the bases of core funding for the Institute. The project will be authorized at a level of 15-17 million dollars, leaving room for buy-ins by bilateral USAIDs in either dollars or local currency to obtain the services of INCAP, U.S. contractors or a combination of the two.

2. Project II: Administration and Management Training

Starting in FY 88/89, using PD&S, ROCAP will help define a strategy for institutionalizing health care administration and management training in the region. A 2-3 million dollar project starting in 1990 will begin to implement the strategy developed.

B. Plan B Activities

1. Follow-up activities in institutionalizing health care management and administration training in the subregion;
2. Increased institutional support for INCAP, particularly for infrastructure and expanding core funding;
3. Follow-on technical assistance for essential drugs and critical supplies.

USAID/ROCAP  
Health and Nutrition Strategy  
for Central America, Panama and Belize  
1988/89-1992/93

I. Background

USAID, through its Regional Office of Central American Programs (ROCAP), has historically played a key role in the development of nutrition and health-related programs and institutions throughout Central America and Panama. USAID/ROCAP has provided substantial support to The Nutrition Institute of Central America and Panama (INCAP), the internationally-regarded regional center of training, research and technical excellence. INCAP provides technical support to the vast array of host country government, PVO, and other multilateral and bilateral donors (PAHO, IDB, UNICEF, and Rotary) and activities aimed at improving health and nutrition in the Central American subregion.

The following strategy paper presents a subregional, five-year plan of action developed for ROCAP. It is consistent not only with ROCAP's key role in the subregion, but with the Agency's Health Policy, Health Strategy, Nutrition Strategy and Child Survival Strategy. It complements the IAC Bureau's Management Objectives for Health and Nutrition, the IAC Bureau Nutrition Strategy currently being developed, and the recommended outline for IAC Country Child Survival Strategies and individual Mission health sector strategies. Its emphasis on priorities and options is designed to allow for flexibility and responsiveness in the rapidly changing environment of the Central American subregion.

IAC Bureau CAI objectives in health and nutrition for Central America, Panama and Belize are the following:

- to improve health and health services
- to reduce infant and child mortality

As broadly stated objectives, these necessarily subsume and imply a myriad of sub-objectives and projects responsive to the particular health and nutrition problems in each of the countries in Central America and Panama. For this reason, and in order to gain a clear understanding of health and nutrition in the subregion, the following subregional analysis was based upon subregional information, as well as an analysis of sector trends, constraints and actions specific to each country in Central America, Panama and Belize (see Annexes B,C and D).

## II. Subregional Trends in Health and Nutrition:

### A. Mortality, Morbidity and Life Expectancy

Mortality rates have declined steadily throughout the subregion over the past several decades. Infant mortality dropped an average of 49 points (deaths in children 0-12 months of age per 1,000 live births) from 1960 to 1980, and child mortality (deaths in children 1-5 years of age per 1,000 children of the same ages) dropped an average of 11.4% over the same period of time (55). The largest gains in both age groups were made in El Salvador and Honduras whose infant mortality dropped nearly 60 points, and whose child mortality dropped nearly 20% over the 20 year period (55).

The reduction in mortality in the subregion is related to gains in life expectancy in these countries. Over a 20 year period the following changes in life expectancy took place: Costa Rica's life expectancy increased nearly 11 years to 72.5 in 1981 (55); Guatemala gained 12 years to 62 in 1987 (55) (16); Honduras gained 12.3 years to 61.7 in 1985 (55) (20); Panama gained 8.5 years to 70.7 in 1980 (55). No data is available on life expectancy for Belize. A gain of 12 years also occurred in El Salvador over a 20 year period to 63 in 1980 (55). However, recent increases in mortality since the late 70's have reduced life expectancy in El Salvador by 10 years in the last 4 years; life expectancy in El Salvador had fallen to 53 by 1984 (10). Even with this decrease, however, all countries are above the USAID standard for life expectancy of 50 years (56).

In spite of consistent declines in mortality in all countries, mortality rates continue to be high by international standards in several. Infant mortality rates (per 1,000 live births) in 1985 ranged from lows of 16.2 in Costa Rica, 26.9 in Panama, and 21.4 in Belize, to highs of 67.7 in El Salvador, 68.5 in Guatemala and 71-85 in Honduras (5). Deaths in the perinatal period are under-reported in Guatemala, where the infant mortality rate is estimated to be nearer that of Honduras (when under-reporting is taken into account). From 1981 to 1985, child mortality (per 1,000 children 1-5 years of age) ranged from lows of 1.0 in Panama and Costa Rica and 1.4 in Belize, to highs of 6.8 in El Salvador, 7.4 in Honduras and 15.5 in Guatemala (5). When these country-level rates were compared to USAID infant mortality and child mortality standards (56), Honduras' and Guatemala's infant mortality rates were estimated to be equal to or have exceeded the Agency's 75/1,000 standard, while Guatemala's child mortality rate exceeded the standard level of 10/1,000 (56).

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It is important to note that mortality rates may vary widely among geographical areas and social classes within countries; each country in the subregion has identified specific areas and population groups with young child mortality rates much higher than the national average. Honduras, for example, reported infant mortality rates in rural areas and the western departments which are over 110 per 1,000 live births, and rates for children of illiterate women as high as 113 per 1,000 (24). Guatemala has reported similar high rates for high risk populations and geographical areas. Also important is the fact that both morbidity and mortality are often significantly under-reported in some geographical areas and among some population groups in the subregion. The most extreme example of this is the Darien area of Panama where an estimated 84% of all deaths are never reported (28).

Another point of concern is the possible negative impact of subregional economic crises and socio-political conflict on morbidity and mortality over the last decade. Although a recent national survey in El Salvador reports an overall decline in infant mortality over the past 30 years (10), some data available shows an increase over the past five years. According to several sources, infant mortality rates in El Salvador had dropped to 44-60/1,000 live births by 1978-83 (10) (58) (60) (9). Although these lower rates may be due to under-reporting or poor data collection during that period, when these rates are compared to a recent survey's higher rate of 67.7% for 1980-84 (10), infant mortality would appear to have increased in El Salvador in recent years. Proportionate mortality for children 1-5 years of age in El Salvador has apparently also increased from 24% of total deaths in 1980 (57) to 45% of total deaths in 1983 (9). Costa Rica has also reported a recent increase in morbidity and mortality from infectious diseases which were previously nearly eradicated (3).

In addition to overall reductions in mortality rates, over the past 15 years there has been a dramatic change in the causes of mortality and morbidity in two countries in the subregion. High morbidity and mortality rates in Costa Rica and Panama, previously caused by infectious diseases, have been replaced by a disease pattern more closely resembling that of the developed world. In both countries, heart disease, malignant tumors, and accidents are now the leading causes of death. Infectious diseases, however, continue to be important as a cause of young child death in both countries where infant deaths are due primarily to complications of the perinatal period, followed by congenital anomalies, and acute respiratory or intestinal infections. Child mortality in Panama and Costa Rica is due primarily to accidents and other trauma, followed by acute respiratory or intestinal infections (3) (28) (31) (32).

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In contrast to Costa Rica and Panama, and in spite of the gains made in overcoming infectious diseases in the past decade, acute respiratory and intestinal infections (which are largely preventable) continue to be the principal causes of illness and death throughout the remaining countries in the subregion. Deaths in infancy are caused primarily by infectious disease complicated by undernutrition and problems occurring during the perinatal period. Deaths in children 1 to 5 years of age are due to acute infectious disease (respiratory and intestinal), immunizable diseases (particularly measles and whooping cough), and undernutrition. This critical situation is of such enormous dimensions that it becomes difficult to grasp: in the subregion (a geographical area 80% the size of Texas), over 13,000 children under 5 years of age in the subregion die of diarrheal disease alone each year (5). A similar number of young children die each year from respiratory infections.

Other important sources of morbidity and mortality include malaria and other vector-borne diseases, accidents and trauma, tuberculosis, heart disease, and cancer. AIDS, though of concern, is not a principal cause of morbidity or mortality to date.

#### B. Undernutrition

Trend data available on the nutritional status of children under 5 years of age in Guatemala and Panama, yields some disturbing information. From the late 60's to the late 70's, the nutritional status of young children in these countries did not improve and may have worsened over time.

Measurements taken on the weight for age (a measure of wasting over time) of Guatemalan children under 5 years of age in 1978 found 26% to be moderately undernourished (Grade II), and 3.2% to be severely undernourished (Grade III). This was only a 5% and 0.2% improvement, respectively, over measurements taken 13 years earlier in 1965. When the 1978 data was re-analyzed in Z scores by INCAP, 43.6% of children were found to be more than 2 standard deviations (s.d.) below the mean in weight for age (roughly equivalent to Grades II and III, or moderately plus severely undernourished), and 59.7% were more than 2 s.d. below the mean in height for age (which measures stunting over time). These percentages were much higher than Z scores from 1965: 7% more children under 5 had low weight for age, and nearly 10% more had poor height for age (6). For purposes of comparison, only 2.8% of a population distributed according to the norms should have either weight or height less than 2 s.d below the mean.

Nutrition information from Panama also shows a decline in nutritional status in young children over time. Measurements taken in 1975 showed 20% of children to be Grade II and III undernourished (weight

for age), a percentage twice as high as that reported 8 years earlier. Conversion of this data into Z scores yielded 15.8% with weight for age more than 2 s.d. below the mean, and 22% with more than 2 s.d. below the mean in height for age. This analysis, too, showed an increase in the percentage of children with poor weight for age of 2.3% since 1967. The percentage of young children with height for age deficiencies, however, had dropped 1.5% over the 8 year period (6).

Honduras, Belize and El Salvador have no trend data available to date on the nutritional status of young children. El Salvador has sources of information dating back several years but none use units of analysis allowing comparison over time. The most recent information was collected in 1978, when 10% of children under 5 were found to be Grade II undernourished (weight for age), and 0.5% were found to be Grade III. This corresponded to 18% of children with Z scores more than 2 s.d. below the mean in weight for age, and 44.1% more than 2 s.d. below the mean in height for age (6).

Results of a nutrition survey conducted in Honduras in 1987 are not yet available for comparison with information on the nutritional status of Honduran children collected in 1966. Data from that early study showed 18.4% of children under 5 to be Grade II undernourished (weight for age), and 1.3% to be Grade III. When re-analyzed by INCAP in 1985, these percentages were found to correspond to 29.5% with weight for age more than 2 s.d. below the mean, and 46.7% with more than 2 s.d. below the mean in height for age (6).

Anthropometric data collected from children under 3 years of age in Belize in 1979 showed 5.5% to be Grade II weight for age, and 0.7% to be Grade III (5). This information has not been re-calculated as Z scores to date, nor are there recent survey data for comparison.

The only country in the subregion to register gains in the nutritional status of young children is Costa Rica. Measurements taken from children under 6 years of age in 1982 showed 2.9% to be Grade II undernourished (weight for age) and 0.2% to be Grade III, 5.6% fewer in Grade II and 0.6% fewer in Grade III than reported in a national survey conducted 16 years earlier (6).

The cutoff point in nutrition established by the Agency (56) indicates which countries have a serious problem with undernutrition among young children. A comparison of the USAID nutrition standard - less than 20% of children 0-5 years of age with chronic and severe undernourishment (less than 50% of weight or height for age norm (Grades II and III), or 2 standard deviations below the mean weight or height for age) - with Z scores from the subregion shows both Honduran and

Guatemalan children under 5 years of age to be significantly below standard in both weight for age and height for age, while Panamanian and Salvadoran children under 5 are below standard in height for age only. A comparison of Gomez data with the USAID nutrition standard yields a slightly different picture, with not only Honduran and Guatemalan, but Panamanian children under 5 years below standard in weight for age.

Food security on the household level is a major cause of undernutrition and a serious concern for most countries. The percentage of the population estimated to be consuming the recommended level of calories ranges from 66% in Costa Rica to 31% in Guatemala (see Annex D). According to the Agency standard (90% of the population consuming the recommended level of calories), all of the countries in the subregion are below standard in calorie consumption. Availability of food on the household level is related to the household's ability to either produce or purchase food. These abilities are threatened by the economic crisis, which has caused the real per capita GDP growth rate to remain negative since 1980.

#### C. Population Growth, Composition and Movements

Although birth rates in the subregion have declined steadily in the past 20 years (55), mortality has declined at even faster rate, keeping population growth rate high at 2.7% from 1982 to 1986. With the exception of El Salvador, where the youngest portion of the population is increasing in proportion to the whole (10), in most countries there has been a slight tendency toward a proportional reduction in the youngest age groups and a slight increase in the proportion of elderly. This tendency toward aging in the structure of the population means long-term changes in the pattern of morbidity - an increase in expensive chronic illnesses, and a decrease in morbidity due to infectious disease. During the period covered by this strategy paper, however, the population in the subregion will remain young. At the present time, approximately 45% of the subregional population is comprised of children under 15 years of age.

Three major population movements have taken place in the subregion during the past several decades: urban migration, population displacement, and migration of refugee groups. All three have major implications for the health sector.

Over the past 20 years, the urban population increased (as a percentage of the total) an average of 8.3%, to comprise 44% of the total population. In Honduras and Panama urban growth over the same period was 13%, while the urban population of Panama grew to over 50% of the total population (53). Belize, too, has an urban population nearly 50% of the whole. However, rural growth in Belize exceeds that of urban areas. In the past 20 years, Belize's urban population fell 4.3% as a percentage of the total population (43).

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Since the onset of violence and socio-political conflict in the late 70's, massive population displacement has increased internal migration from rural to urban areas and created large refugee and displaced populations. Estimates of the number of displaced range from 610,000 to 1,050,000, with the largest number of displaced in El Salvador (500,000 or 10% of the population) (5) (61). The most recent estimate of the number of refugees is 277,500 and growing (61). Some refugee populations are large enough to have significantly added to the population of the host nation; the estimated 15,000 in Belize have added another 10% to the population (61) (43), and the estimated 180,000 in Guatemala have increased the population 2.5% (61).

### III. Major Constraints in the Health and Nutrition Sector

#### A. Sector Economic Contraction or Stagnation

Subregional growth of real GDP dropped significantly in the past decade from a weighted average of 6.4% in 1978 to a low of -3.4% in 1982. Although economic growth has improved slowly since 1982, rates remained low at 1.6% in 1986 (62). Debt to GDP ratio in the subregion increased during this same period, from 26.4% in 1978 to nearly 50% in 1986. At the same time, the cost of servicing the external debt rose from 11% of total exports in 1978 to 26.4% in 1985 (62).

One result of reduced growth and increasing debt has been a reduction in public sector expenditures. In nearly all countries, expenditures in the public health sector fell dramatically as a percentage of total expenditures. Even in those countries where the health sector's proportion of total expenditures remained steady, high inflation rates reduced expenditures in real terms. Another result of the economic crisis has been continuing negative growth in real per capita income, reducing access of high-risk households to basic goods and services including public and private health care. All countries have expressed concern about reductions in the health sector and household budget, and the possible negative impact of these reductions on health sector coverage, morbidity and mortality in the high-risk population.

#### B. Weaknesses in Health Sector Service Delivery

The public health system (Ministries of Health, Social Security Institutes) in Costa Rica and Panama provides services to an estimated 90% of the population (3), while the private formal system of health care delivery (private physicians) in those countries is relatively small. In Guatemala, Honduras and El Salvador, on the other hand, public health system coverage is very low (35% reported, for example for Guatemala), and the system is skewed toward the urban, low-risk population.

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The private formal health care system in these countries has a similar bias. However, the private informal health care system (pharmacies and other providers), while technically inadequate, is more equitably distributed than the public or formal private systems and plays a significant health-provider role in high-risk areas. Other private health sector organizations, including PVOs, are important health care providers among high-risk populations in Guatemala and El Salvador, and to a lesser extent, in Honduras.

The most salient weaknesses in public and private health sector delivery systems have been identified in a series of country-specific and subregional documents (see reference list for this paper). The following is a brief discussion of those most commonly mentioned.

1. Insufficient or inadequate resources

In spite of facility construction efforts in some countries over the past decade, there continues to be a deficiency in the number of health facilities. This is particularly true in rural and marginal urban areas. Existing public health facilities and equipment are frequently in poor repair, as most countries lack adequate maintenance systems. Deficiencies also exist in supplies. Honduras, for example, reports public health facilities to have only 35% of the required drugs on hand (27).

2. Inadequate national and subregional policy formulation and planning

Although there have been recent advances in country-specific policy development and planning, particularly in the area of Child Survival, weaknesses still exist on both national and subregional levels. This is most noticable in the area of essential drugs and other supplies which are critical to the functioning of the health sector. Clearly, planning is extremely important in times of financial scarcity in, order to maximize resource utilization and allocation.

3. Inadequate coordination on national and subregional levels

Weaknesses in program coordination in the health and nutrition sector are common in all countries. Lack of coordination exists among local, regional and central levels of service delivery, between divisions within the public sector, and with other sectors and health providers. In spite of recent improvements, particularly in the area of Child Survival, weaknesses in coordination also exist on the subregional level. Donors, each with their own projects and plans, contribute to

this. Lack of coordination is a major cause of the excessive duplication in efforts, gaps in programming and poor use of human and material resources found commonly throughout the subregion. Again, in times of fiscal scarcity and crisis such as these, coordination on both national and subregional levels is essential if resources are to be used efficiently and appropriately.

#### 4. Inappropriate resource use and allocation

Another serious constraint to improving health and nutrition is the inappropriate allocation of both human and material resources (facilities and critical supplies) within each country. In most, both private formal and public health sector resources are strongly biased toward urban areas. This bias leaves rural areas - where undernutrition, morbidity and mortality indicators are highest - with fewer resources per capita. Within urban areas, facilities and personnel are allocated inappropriately as well. Public and formal private health resources are scarcest in the growing and high-risk marginal urban settlements. Thus, there is low sector coverage where there is the greatest need.

#### 5. Deficiencies in the area of human resources

As human resource distribution in the health sector is associated with the distribution of facilities, some of the infrastructure problems discussed above also apply to human resources. In most of the subregion there is a deficiency in the number of sector personnel and human resources are inappropriately distributed, leaving high-risk areas and populations with the lowest coverage.

In addition to these problems, human resources are also inappropriately used. Public health delivery throughout the region is based upon a tiered system which places least-trained individuals at the community level. This system, combined with norms which often excessively restrict the activities of local-level practitioners, directs much of the responsibility for health care to central levels and to the physician. Because of this, highly-trained and relatively expensive physicians comprise a large proportion of total human resources in public health in the subregion.

Education and training are also deficient. Most providers with key roles in the health sector have received medical training in either the U.S., or from medical schools which focus on illnesses common to the developed world and which encourage specialization and private practice. In addition, most providers on all levels lack technical biomedical training in infectious disease and undernutrition and their management, although these make up the predominant disease pattern in the subregion. Most also lack training in basic principles of primary health care, prevention or public health.

#### 6. Overcentralization

The majority of public health health systems in the subregion are heavily weighted toward the central level in both planning and administration of programs. Nearly all Ministries of Health recognize the need for decentralization. However, even Costa Rica and Honduras, where local programming and regionalization efforts are underway, report continuing problems and little success. This emphasis on control and planning on the central level continues to have a negative effect on health system responsiveness to local level needs.

#### 7. Inappropriate or deficient emphasis

Neither private formal nor public health systems are sufficiently focused on those geographical areas and sub-populations which are at highest risk. Nor are services targeted to primary health care and preventive interventions. There is a clear need to channel resources to local health and nutrition needs, as defined by local and regional personnel. Programming should be more clearly focused on the highest-risk areas and populations within the subregion.

#### 8. Weaknesses in management

Management deficiencies are consistently reported as a major constraint to the effective use of existing resources. In most public health health services, management personnel lack appropriate training and rarely have any previous experience in management. Deficiencies in management are also due, in part, to frequent re-organization of the institutional structure or changes in health personnel. In some instances, the institutional reorganizations have actually increased duplication in effort, scattered responsibility for one project among multiple divisions and promoted lack of coordination. Most health systems also lack management information systems on which to base the planning, administration and evaluation of programs.

#### 9. Deficient information systems

Both public and private health providers lack an efficient information system which can be used by all levels for program planning, implementation, monitoring and evaluation. Countries also lack adequate surveillance systems in both nutrition and infectious disease. Although some progress has been made in recent years, much of the health information available through the public health system is still tabulated by hand. In some countries, there is duplication and often disagreement in the health information presented by the public health sector, and critical information is often lacking due to re-organization or inability

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to collect and process data. Rarely is there subregional comparability among country-specific systems, limiting the possibility for subregional surveillance and reporting.

#### 10. Technical deficiencies

In addition to deficiencies in information systems and surveillance, there are also serious gaps in the sector's knowledge of socio-economic, cultural, and biomedical aspects of the most common illnesses. The health sector lacks knowledge, for example, of the real causes of much of the perinatal mortality occurring in the region or the proper management and feeding of a young child during a diarrheal episode. Little is also known about the management of acute respiratory infection. This lack of knowledge restricts the development and implementation of effective and appropriate health care interventions.

#### 11. Lack of essential drugs and supplies

Many of the constraints discussed above also affect the area of essential drugs. In addition, public health systems have noted the following problems: lack the capacity to produce essential drugs and critical supplies and lack of quality control where this capacity does exist, high costs of imported medicines, and weaknesses in the logistics system which create frequent drug and supply shortages and interruptions in service delivery.

#### C. Socio-Political Conflict

Since the late 70's, sporadic violence in some countries and almost continual violence in others has created serious constraints to health sector activities. In some countries, whole geographical areas have been cut off from both public and private health providers, many facilities have been severely damaged, and many closed.

Socio-political conflict has also caused massive population movements of displaced persons and refugees, presenting serious problems to the public health sector. A survey of the displaced in El Salvador, the largest displaced population in the subregion, shows severe (Grade III, weight for age) undernutrition in children under 5 years of age to be over six times that reported for the nation as a whole in 1978 (8). Costa Rica has also reported a refugee-related resurgence in morbidity and mortality from infectious diseases and immunizable diseases previously nearly eradicated (3). Due to the political nature of the influx of refugees, some countries do not know the size of the refugee population, nor does the health sector plan or procure supplies based on a re-adjustment of population size. Belize for example, using population

projections from the last census for programming, reported having under-estimated the quantity of vaccines required to meet the needs of young children during the most recent vaccination campaign. Costa Rica faces the same problem.

#### D. Constraints to Access and Utilization

All countries express particular concern for those geographical areas not covered adequately by either the private formal or public health sector. As discussed above, this situation is due, in part, to socio-political conflict and the poor distribution of existing physical and human resources. Other constraints to access include geographical barriers, economic barriers, and those resulting from ethnic, linguistic and cultural diversity.

Although the dense jungle of the Darien in Panama is perhaps the most dramatic geographical barrier to provision and use of public health services, much of the highest-risk population in the subregion lives in mountainous or jungle terrain reached only by foot or on horseback. Half of each year the climate further impedes access, as rain causes landslides and makes rural roads impassable.

The constriction of the subregional economy and increasing unemployment, coupled with inflation and a rise in consumer prices over the past decade, have caused widespread concern about the health of the highest risk groups in the subregion. Decreased resources on the household level can be expected to have caused a reduction in the use of health services. This is particularly true when drugs unavailable through the public health system must be purchased at a pharmacy, or transportation must be used to reach the nearest health care provider.

The wide diversity of ethnic groups, languages and cultures in Central America, Panama and Belize also creates some constraints to access and utilization of public health resources. In most countries the majority of health personnel tend to be of one ethnic group speaking a particular language and holding culturally-specific views of health and illness. The patient population, however, may be comprised of one or many different ethnic groups which share neither the language or the health views of the providers. This lack of cultural and linguistic fit causes constraints on both sides which are related to the common problems of prejudice, intolerance, and mistrust.

#### E. Other Underlying Constraints

The morbidity and mortality status of the population depends on many factors, only some of which lie within the control of the health sector.

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Perhaps the most important of these are the socio-economic status of the population and the related issues of household food security, the availability of water and sanitation, and literacy levels.

A recent survey of water and sanitation coverage found an average of 57% of the population to have access to potable water, while 55% have sanitation facilities. In nearly all countries, rural coverage is less than urban. On the subregional level, only 39% of the rural population has access to potable water: rural coverage is lowest in El Salvador, Guatemala and Panama where only 20-26% of the rural population has access. On the subregional level, 45% of the rural population has sanitation facilities; rural coverage in sanitation is lowest in Guatemala and El Salvador at 29-35% (63). Families who must go great distances to bring water home tend to use it frugally and re-use it frequently, increasing exposure to infectious disease. Lack of sanitation facilities increases contamination of the environment - particularly the water source - and continues the cycle of infection.

Household food security is influenced by a variety of factors, including the ability to purchase or produce food. Provoked by economic decline, the real growth rate in GDP per capita fell from 3.3% in 1978 to -5.9% in 1982. Although this has improved since 1982, growth has remained negative, registering -1.0% in 1986 (62). According to income distribution data, the poorest 20% of the population receives under 5% of total income (see Annex D). The income of the highest-risk portion of the Central American population, then, is small and decreasing each year in real terms.

In the meantime, the consumer price index (the cost of basic goods and services) doubled and quadrupled in some countries from 1980 to 1987. In Costa Rica, the consumer price index in 1987 was 7 times that of 1980 (63). The reduction in real income, combined with an increase in prices, can be expected to have had a negative impact on the household's ability to purchase both food and health care. When income distribution was taken into account and compared to price increases at the onset of the economic crisis in 1980, nearly 63% of the subregional population was reportedly unable to meet basic needs (the price of the minimum family food basket over half of the total family income), while 40% lived in absolute poverty (family income less than the price of the minimum family food basket) (see Annex D).

Another factor closely related to morbidity and mortality within the household is educational status. Low literacy levels, particularly among women, have been shown to be strongly correlated with poor nutritional status of young children, as primary caretakers lack the knowledge necessary to cope with child rearing in a high risk environment.

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According to information gathered from 1971-81, nearly 40% of the subregional population is illiterate. The highest percentages were 43%-44% in El Salvador, Honduras and Guatemala (62).

Although there has been an overall decrease in mortality and birth rates over the past 20 years, birth rates have not declined as sharply as mortality rates, leaving population growth rates high. On the household level, this is reflected in a high dependency ratio (economic dependents to economically active adults) and poor maternal health caused by inadequate birth spacing and long periods of lactation. This, in turn, results in high risk-births and low birthweight babies, who are at high risk of death from perinatal complications or infectious disease.

#### IV. Actions Being Taken to Reduce Constraints

The continuing economic recession in the subregion has imposed severe constraints on public spending in the health sector. Although it is the largest provider of health services in the subregion, it chronically suffers from administrative, logistics and other structural problems including overcentralization and fragmentation of programs. This situation is made more acute in the face of budgetary restrictions.

During the last decade, regional economic and socio-political problems have seriously affected health and nutrition. Massive population movements have created new high-risk groups of refugees and the displaced; decreasing per capita income and inflation have contributed to increased food insecurity and threatened spending on health care at the household level; there is evidence of a resurgence in infectious disease and a worsening of the nutritional status and mortality rates of young children in some countries. If the gains made in morbidity and mortality over the past two decades are to be maintained and new problems adequately addressed, the effective management and delivery of public health services is critical.

International donors in the health sector are providing increasingly high levels of financial assistance to national health programs to address these needs. Expansion in donor aid has focused on priority areas of primary health care and on strengthening the public health system, particularly in child survival - reflecting the major causes of young child death. High levels of donor assistance, however, create new problems with counterpart absorptive capacity, including dependency and increasing recurrent costs. These, in turn, create obstacles to administrative, logistics and human resource readjustments.

In order to systematically analyze this dynamic process, three steps were taken prior to the development of an appropriate strategy for ROCAP

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in the health and nutrition sector. These included: 1) compilation and analysis of health and nutrition trends, sectoral constraints, donor activities and review of strategy and program plans in each of the countries in the subregion (presented in Annexes B and D), 2) compilation of donor activities and future plans on the subregional level, presented in Annexes C and D, and 3) information provided by all other major donors and AID bilateral missions on the following issues: a) their current actions in health and nutrition, b) the directions they plan to take in the health and nutrition sector over the next five years, and c) suggestions for the subregional role most appropriately played by ROCAP.

The following section presents a brief description of donor activities (see tables in Annexes B, C and D), followed by a gap analysis (Annex A). This compares donor activities with the major areas of constraint, major risk groups, and principal causes of morbidity and mortality in the subregion (outlined previously in sections II and III of this report).

#### A. Donor Activities in the Subregion

##### 1. WHO/PAHO and donor countries

In 1984, the Ministers of Health of Central America and Panama approved the initiative entitled "Priority Health Needs of Central America and Panama". Seven priority areas and objectives for the health sector through the year 2000 were identified, based on an analysis of the health and nutrition situation, the needs of the public health sector and the principal problems in each country and the subregion. Priority areas identified in a series of documents presented by PAHO are:

- a.) Strengthening health services
- b.) Human resources development
- c.) Essential drugs
- d.) Food and nutrition
- e.) Tropical diseases
- f.) Child survival
- g.) Water and sanitation

WHO/PAHO will continue to implement a strategy through various country-specific and subregional projects that fall within these seven priority areas. At the present time the major donor countries, organizations and foundations supporting projects through WHO/PAHO are the following: CEE/Italy, United States, Holland, Chile, Belgium, West Germany, Spain, France, Canada, Japan, OAS, Kellogg Foundation, IDB, and the Rockefeller Foundation. Some WHO/PAHO activities are implemented

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through INCAP, the regional health and nutrition institute. WHO/PAHO also provides technical assistance in the subregion with its own resources. As the lead donor health agency in the subregion, WHO/PAHO priority areas both parallel and complement AID bilateral and subregional projects, as well as AID CAI objectives.

## 2. UNICEF

UNICEF is also a major donor and participant in health and nutrition in the subregion. The major areas of programming have included the following:

- a.) Child survival
- b.) Water and sanitation
- c.) Urban areas (water, sanitation, primary health care)
- d.) Women in development (income generation)
- e.) The displaced

At the present time, countries and organizations who are major donors to UNICEF programs include the following: EEC/Italy, Canada, Norway, the Netherlands, France, Belgium, Japan, Sweden, the United Kingdom, United States, and OPEC. UNICEF also provides assistance to Central America with its own funds from the UN. According to the subregional office of UNICEF, programming through 1991 in each country and on the subregional level will be in the same five areas as listed above. However, a new strategy paper (available mid-88) may re-focus UNICEF activities on child protection, child development, and female literacy. Although UNICEF plans to continue working in Child Survival, future activities may have a broader focus, moving away from technological interventions (immunizations, ORS/ORT) towards strengthening basic services including traditional birth attendant training, health education, community organization, and broader approaches to diarrheal disease control. These program areas are also compatible with and complementary to AID CAI objectives and AID bilateral programs.

## 3. UN World Food Program

The World Food Program is a major donor of food commodities to five countries in the subregion. The food support given to El Salvador, Guatemala, Panama, Costa Rica and Honduras is principally in the following project areas:

- a.) Nutrition education and supplementary feeding  
for at-risk groups (pregnant/lactating women  
and children under 5)
  - b.) School feeding programs
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- c.) Emergency feeding for refugees (H)
- d.) Food for work: rural housing and community infrastructure, income generation projects, soil conservation, agroforestry, basic grain production and agricultural diversification, community development, environmental sanitation

These program areas are compatible with bilateral food and nutrition programs and complementary to AID CAI objectives.

4. USAID/Bilateral Missions/Country Counterpart Agencies

Bilateral missions and their counterparts play a key role in health and nutrition. USAID has traditionally focused its resources (both personnel and financial) at the bilateral mission level where long-term intensive, national health sector support and strengthening projects are appropriate. Projects are concentrated in the following areas:

- a.) Health sector strengthening (CR, ES, B)
- b.) Health sector strengthening, focusing on child survival (G, H)
- c.) Child survival/PVO (ES, H, B)
- d.) Water and sanitation (ES, G, H, B)
- e.) Malaria (B, H, ES)
- f.) Family planning (ES, G, B, H) (P and CR, central funds)
- g.) Breastfeeding promotion (ES, B, H)
- h.) Health and jobs for displaced families (ES)
- i.) PL 480 Title II food commodities programs, focusing primarily on maternal-child health, other child feeding and food for work projects (ES, G, H)
- j.) PL 480 Title I generating local currency which is used principally for private enterprise and agriculture sector development, construction of water facilities and roads, support to agrarian reforms and self-help measures, to provide balance of payments support, supply essential food imports, and keep key social services and private sector activities operating (CR, ES, G, H),

There are two designated USAID Child Survival emphasis countries in the subregion: Guatemala and Honduras. El Salvador, though not a Child Survival emphasis country, is the largest recipient of AID Child Survival funds. Consequently, USAID health bilateral assistance to these countries is focused on public health systems strengthening in support of Child Survival programs. USAID assistance to Belize is also concentrated in Child Survival, but the primary implementing groups are in the private sector. Costa Rica, with different morbidity and mortality patterns, is addressing health care financing and administrative/management concerns in the Social Security system with USAID assistance.

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## 5. USAID/ROCAP

ROCAP has provided substantial support to the Nutrition Institute of Central America and Panama (INCAP), which is an internationally-respected regional center of training, research and technical excellence. INCAP provides technical support to host country governments, PVOs, private sector health providers and other multilateral and bilateral donor programs and also supports activities aimed at improving health and nutrition in Central American and Panama. ROCAP programs with the Institute have been focused in two areas:

a.) Promotion of child survival/MCH technologies and technology transfer and strengthening of regional and national institutions to enable them to implement interventions in the area of child survival; and

b.) Improving the effectiveness of national food assistance programs through technology transfer and institutional development, both at the regional and national levels.

## 6. USAID/Washington

AID central resources (e.g. S&T Bureau, IAC/DR/HN) are available to support and assist subregional bilateral missions and ROCAP in the implementation of health and nutrition initiatives. The S&T Bureau strategy and programs are consistent with the Agency focus on primary and preventive health care service delivery approaches to the implementation of Child Survival interventions. Technical assistance, information exchange and research are key elements in support of ROCAP projects.

IAC/DR/HN has a variety of projects which assist and complement subregional bilateral mission and ROCAP initiatives. Those activities which are relevant to subregional projects include clinical and public health administration training, coordination, research and technical assistance, malaria and essential drugs, an expanded technical assistance program on immunization (donor coordination, planning, technical assistance), and health care financing research.

## 7. Other donors

Other donors to the health and nutrition sector in the subregion include the International Development Bank (IDB), which supports infrastructure development, and country donors with individual projects taking place in each country, perhaps the largest of which are water and sanitation projects supported by Canada.

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## B. Gaps in the Current Portfolio

Major constraints in the health and nutrition sector, major risk groups and principal causes of morbidity and mortality were compared with activities planned and currently programmed throughout the subregion (see Annex A). All major donor and health sector activities were included in this analysis: USAID (all bilateral missions, ROCAP and USAID/Washington central assistance), WHO/PAHO, UNICEF, all country donors and the World Food Program. Important gaps between health sector needs and programming were identified in relation to IAC CAI health objectives as follows:

### 1) To improve health and health services:

- insufficient public health facilities (A.1.)
- inadequate maintenance and repair (A.2.)
- insufficient equipment (A.3.)
- inappropriate distribution of facilities (A.8)
- inappropriate use and distribution of human resources (A.8)
- inadequate management skills (A.13)
- inadequate public health education (A.15)
- inadequate information systems (A.16)
- inadequate monitoring/evaluation/surveillance systems (A.17)
- insufficient essential drugs/quality control (A.18)
- inadequate supervision (A.20)
- inadequate care financing (A.23)
- inadequate research - operations (A.22), applied (A.25)
- inadequate support in the biomedical, socio-economic, and cultural knowledge needed for planning, implementation and case management (A.26)
- inadequate coverage of high risk groups (A.27)

Problems related to inadequate coverage of high-risk groups, including inappropriate distribution or insufficiencies in infrastructure and human resources, which are not included in the current portfolio (insufficient public health facilities, inadequate maintenance and repair, lack of equipment, inappropriate distribution of facilities, inappropriate use and distribution of human resources, and inadequate supervision), are best addressed within the bilateral mission context. This is due to the fact that intensive long-term relationships with the host country are critical to successful systematic change.

Although four countries (Honduras, El Salvador, Guatemala and Belize) have undertaken major long-term health systems support and strengthening projects, the shift in Agency focus to primary health care and concern

for recurrent costs has made the construction of infrastructure and procurement of major commodities inappropriate for USAID assistance either bilaterally or regionally. The IDB loan mechanism (as in Honduras) is more relevant for these long-term capital-intensive investments in infrastructure.

ROCAP's contribution to the problems of lack of facilities, drugs and critical supplies may be most appropriate in the exploration of health care financing and essential drugs. At the same time, the issue of inadequate coverage may be best addressed by working through the private health sector, in addition to the public health sector.

Other basic constraints to improvements in health and nutrition are inadequate public health education, and inadequate management skills in the public health sector. Management positions in the public health sector are held, for the most part, by physicians trained in curative medicine who lack adequate experience in management and public administration. Training and education in management and public health are essential if there is to be appropriate, efficient and effective use of available physical and human resources. All AID bilateral health systems strengthening projects recognize this constraint and have moved to address education and training needs. However, all countries lack the institutional resources for development of national long-term public health education or management and administration training capabilities. As these education and training needs are similar throughout the subregion, activities in this area would be an appropriate subregional focus.

A group of constraints not addressed by the many bilateral health portfolios, but basic to improved health and health services delivery, are : the need for a subregional standardized information system to be used in program planning; monitoring, evaluation and surveillance systems; sectoral capacity in the subregion for operations and applied research; and provision of the biomedical, socio-economic and cultural knowledge lacking but needed for planning, implementation and case management (e.g. technical experts, literature/information resources).

Though basic elements of health information systems have been programmed on a bilateral basis in Guatemala, Costa Rica, Honduras, El Salvador and Belize, subregional comparability and technical excellence are neither fiscally possible nor appropriately developed on a country-specific basis. A Centers for Disease Control (CDC)-like model of technical support to the health sector with strong capabilities in applied and operations research (focused on provision of services to the high-risk population), monitoring, evaluation, surveillance and technical

education/training is more appropriately made available to countries at the subregional level.

2) To reduce infant and child mortality and morbidity:

- undernutrition (B.3)
- acute respiratory infections (B.4)
- perinatal problems (B.5)
- accidents and trauma (B. 6)
- malaria (B.7)
- alcohol and drugs (B.8)
- AIDS (B.10)
- tuberculosis (B.11)
- household food insecurity (C.3)
- illiteracy (C.2)
- lack of water, lack of sanitation (C.1)
- refugees and the displaced (D.5,6)
- other high risk groups (rural, marginal urban) (D.1,2)

This objective (to improve infant and young child morbidity and mortality) is essential for achievement of the Agency's child survival goals. The gap analysis highlighted deficiencies in several basic technical child survival areas: undernutrition, acute respiratory infections, and perinatal problems. Because these content areas are not adequately covered by donor programs, but are critical to reducing infant and child mortality and morbidity rates in the subregion, they are appropriately addressed through both bilateral and subregional programs.

Although malaria is currently being addressed by AID/W centrally-funded assistance (through WHO/PAHO), and by country-specific bilateral programs in El Salvador, Honduras and Belize, malaria was also identified as a content area not fully covered by donor programming. Because malaria is a problem not limited by national borders, (Its spread is influenced by population movements across borders, conflict restricting program entry into some portions of the subregion, and a balanced program of continuous spraying and treatment of cases), it is a logical candidate for subregional support.

Other health problems identified in the gap analysis which impact on morbidity and mortality rates are: accidents and trauma, alcohol and drugs, and TB. For the period of time covered by this strategy paper, none of these problems can be expected to be major contributors to infant or child mortality subregionally, although they are major problems for some countries (Costa Rica, Panama and Belize, in particular). Due to their country-specific nature, these are most appropriately dealt with through USAID bilateral assistance.

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The growing concern with AIDS in the subregion will be addressed by USAID/W centrally-funded assistance to bilateral mission health programs. This will be done in collaboration with WHO/PAHO (the designated lead agency for AIDS programs in the region), due to host country counterpart sensitivities. At this time, no countries in Central America are targeted for donor intensive focus activities. During the period of this RDSS strategy, however, a regional mechanism for monitoring, surveillance and technical assistance may be required and appropriate.

Another gap in programming related to factors underlying morbidity and mortality rates is the area of literacy. This is most properly addressed by bilateral missions through the education sector.

Lack of adequate and high quality water supply and sanitation, are other important factors underlying morbidity and mortality and are areas in which many health sector donor activities are taking place. A recent analysis of the water and sanitation situation, however, points out the need for increased funding in this area to attain CAI objectives by 1992 (64). As national institutions exist in each country to address nationally-defined water and sanitation objectives, it is doubtful that a subregional project coordinating or advising these groups would improve their effectiveness or efficiency. For this reason, the areas of water and sanitation are more appropriately addressed on the national, bilateral level.

When high-risk groups were compared to areas of specific donor activity in the gap analysis, it became clear that the primary high-risk groups targeted by the donor health institutions were children under 5 years of age, and pregnant/lactating women. All other risk groups were receiving limited attention, most notably the displaced, rural and marginal urban populations. ROCAP/INCAP has been working with these groups indirectly through technical assistance to food programs in the subregion. The only high-risk group which was not a focus of any health sector donor activities was the refugees. This group is most appropriately addressed by United Nations programs such as the UN High Commission on Refugees rather than AID, due to the complex international, legal nature and political sensitivities of the problem.

It is important also to identify those areas of constraint in regional health activities currently being addressed by ROCAP, and which ROCAP should continue to include in its health and nutrition portfolio. The constraint-donor analysis (Annex A) shows ROCAP activity, along with other major donors, in policy development, planning, and coordination; strengthening primary health care, community outreach and prevention; providing limited management and other training; providing information, and developing monitoring and evaluation systems; working in mass media and promotion; operations research, applied research and technical support.

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ROCAP has also addressed the areas of diarrheal disease, immunizable diseases, and undernutrition, has major initiative in food and nutrition, and has had some involvement in the area of acute respiratory infections and perinatal problems. The major underlying factors associated with morbidity and mortality which are addressed by ROCAP programming are household food insecurity, and high risk births. ROCAP projects are targeted primarily to children under 5 years of age and pregnant/lactating women and, secondarily, to other high risk groups receiving food assistance (including schoolchildren, low income groups and the displaced).

It is clear from the analysis of constraints/donor activities in health and nutrition that ROCAP is now playing, and should continue to play, an essential complementary role to other donor activities, focusing on those which provide support to public and private programming of Child Survival activities and food and nutrition programs.

The result of interviews conducted with other major donors (AID bilateral missions, WHO/PAHO and UNICEF) (see Annex A) provided a list of topic areas in which ROCAP involvement was considered to be both appropriate and necessary. This list complements and reinforces the areas of constraint identified independently through the gap analysis (Annex A) discussed above.

Donors identified the following as activities appropriate for ROCAP involvement in the future: coordination; management training and public health education; information; monitoring/evaluation and surveillance systems; essential drug/quality control; social marketing, mass media and public/community education; technical assistance; and applied and operations research. Donors and missions felt ROCAP activities should be concentrated in the following content areas: child survival/maternal-child health and food and nutrition; diarrheal disease, acute respiratory infection, immunizable illnesses and undernutrition, malaria, household food insecurity, high risk births and birth spacing, water and sanitation and with refugees. Strategy focus should continue to be on primary health care, prevention and community outreach.

Other suggestions not included in the previous gap analysis were: AID health/nutrition technical assistance to AID bilateral missions, and coordination between agricultural and nutrition regional institutes.

In summary, based on a cross-analysis of the major health and nutrition sector constraints, and USAID and other major donor project assistance (see table in Annex A), several remaining important gaps in the assistance portfolio were identified. The following list identifies those remaining gaps and areas of continuing activity appropriate for regional assistance through ROCAP funding mechanisms. Those marked with an

asterisk were also areas of ROCAP activity recommended by bilateral missions and other donors:

1. Activities in the following technical content areas:

- \*a.) Diarrheal disease
- \*b.) Acute respiratory infection
- \*c.) Immunizable diseases
- \*d.) Undernutrition
- e.) Perinatal problems
- \*f.) Malaria
- g.) AIDS

2. Focusing on the following groups:

- a.) Children under 5 years of age
- b.) Pregnant/lactating women
- \*c.) Other high risk groups including marginal urban, rural, and displaced populations

1. Strengthening the health/nutrition sector through:

- \*a.) Policy development, planning and coordination
- \*b.) Focus on improved coverage, primary health care, prevention and outreach
- c.) Training and education
  - \*1. public health education
  - \*2. management training/health care financing
  - \*3. community education/mass media
- d.) Scientific and technical support
  - \*1. information, monitoring and surveillance
  - \*2. applied and operations research
  - \*3. biomedical, socio-economic, cultural knowledge necessary for planning, implementation and case management
- \*e.) Essential drugs/quality control

V. Plan of Action

A. Overview

Goal 3. Shared distribution of the benefits of growth

Beginning in FY 1989, and in response to CAI recommendations and IAC Bureau management objectives, orientation of the ROCAP program towards shared distribution of the benefits of growth focuses on two major and complementary objectives:

1. to improve health and health services
2. to reduce infant and child mortality

Prior to the economic crisis in the subregion, steady economic growth promoted expansion of the public and private health sector, focusing on expansion of fixed-facilities and curative services. These included pilot projects in public health, which tested limited models for primary health care services and community outreach (using volunteers or auxiliary workers). Major indicators of health status, including mortality rates and life expectancy, though still high by international standards, improved considerably over this period. However, sector coverage of high risk groups continued to be low. This was a source of concern as the nutritional status of young children in some countries in the subregion showed no improvement.

Unfortunately, severe socio-economic and political crises presented the health sector with new and serious problems. Substantial contractions in economic growth caused concomitant contractions in public health expenditures, reducing resources available for maintaining gains of the previous period. This conflict led to the closing, destruction and deterioration of health facilities and exacerbated existing system-wide deficiencies in allocation of facilities and the use and training of human resources. Pilot projects were completed, but the results were not incorporated into the health structure and, in most instances, the system fell back on its core of curative and fixed facility-based service delivery.

As this occurred, there was also an increase in human needs. New high risk groups of refugees and displaced persons were created. Some countries reported an upward trend in infectious disease and mortality. Per capita GDP growth continued to be negative while inflation remained high, increasing household food insecurity and lowering consumer purchasing power for basic needs, including health care.

The current situation compels the health sector to use resources more effectively at the local level and with high-risk groups, and to reorient service delivery from a curative, centralized, fixed-facility model to one based on primary and preventive care. In order to prevent further deterioration, maintain gains in morbidity and mortality, reorient service delivery, and address the increasing needs of high-risk populations, the public health sector has come to rely heavily on assistance from international donors, including that of USAID bilateral missions and ROCAP.

B. Actions to be Undertaken by ROCAP/Regional Institutions

It is clear from the preceeding analysis that there is a necessary role for ROCAP in support of bilateral missions and other donors in health and nutrition. In spite of improvements in health indicators and preventable infectious disease, and commitments by governments to improve health services and increase food supplies, large segments of the population continue to suffer from disease and undernutrition.

In order to address these issues, the ROCAP Strategy in health and nutrition places high priority during the next five year period on the content and project areas described below:

1. Technical Support to Maternal-Child Health and Food and Nutrition Programs

The capabilities and current directions of INCAP closely match the majority of those areas identified above as critical subregional needs appropriate for ROCAP involvement. For this reason, ROCAP will work through this subregional institute to strengthen national-level public and private service delivery and educational institutions. ROCAP will continue to support INCAP over the next five years in the areas identified by the above analysis as follows:

a.) Maternal and Child Health

Continue support and strengthening of scientific and technical assistance for maternal and child health programs in the public and private health sector through the following:

- development of mechanisms for identifying acute disease problems and establishing comparable national/subregional monitoring and surveillance systems for policy and planning assistance;
- development of the capacity for appropriate applied and operations research;
- assistance in dissemination of scientific and technical information;
- expansion of biomedical/nutritional technical support, particularly in the fields of acute respiratory infections, undernutrition and perinatal problems, maintaining those in control of diarrheal disease and maternal-infant feeding;

- development of public health education and training (in epidemiology, statistics and other subjects) which complement the areas listed above, and support the incorporation of public health education in medical school and technical training curriculum;

- facilitate collaboration and coordination in policy development, planning and program implementation among public and private sector institutions and among donor agencies;

b.) Food and Nutrition

Continue support and strengthening of scientific and technical assistance for public and private sector food and nutrition activities through the following:

- continue coordination with relevant public and private health/nutrition, food and agriculture and other sector institutions and with donor agencies in policy formulation, planning, program development and implementation;

- establish the nature and extent of household food insecurity, and develop regional surveillance and national consumption/nutrition monitoring mechanisms;

- develop the capacity for applied and operations research and policy analysis;

- continue training in food and nutrition;

- disseminate appropriate scientific and technical information in food and nutrition;

- expand the technical support network, particularly in the areas of:

- 1) assistance in food needs assessments, monitoring and surveillance, identification of areas of food deficits both geographically and among socio-economic strata;

- 2) assistance in carrying out the disincentive analyses required by the USG for all food programs;

- 3) assistance in coordination of food assistance resources to meet overall country development goals and objectives and to improve national and household food security;
- 4) assistance in improving the management of all types of food assistance programs, including concessional sales programs;
- 5) assistance in the analysis and evaluation of policies and national development programs for their effect on household food security and well being.

c.) Institutional Strengthening

Viewed from both the strategic and managerial perspective, a major portion of ROCAP's efforts in health and nutrition over the next five year period will focus on continued institutional strengthening of INCAP, the subregional institution working in the fields of food, nutrition and health. INCAP activities will be used to support bilateral efforts to strengthen national institutions and affect national planning, policy formulation and coordination in the areas outlined above.

Over the last ten years, ROCAP has provided substantial support to INCAP, almost all of which has been to carry out specific technical assistance, training and research in support of strengthening host country programs in the public and private sector. Very little ROCAP/INCAP support to date has gone directly toward strengthening INCAP itself. The following changes in the Institute since 1979 have made it desirable to support internal strengthening activities at this time:

- INCAP's efforts over the last five years have been directed toward strengthening technical assistance, training and applied research in support of member country programs, and there has been a constantly growing demand for its services in the technical areas identified above. The Institute, its member countries and other donors have clearly identified the role INCAP can and should play in solving the region's food, nutrition and health problems.

- Most of the senior staff who started the Institute have recently retired, leaving a relative scarcity of mid-level professionals. Their places have been filled by dynamic young professionals with excellent potential, but with relatively little experience or, in many cases, the advanced degrees necessary to maintain the quality of work expected from an institute of technical excellence such as INCAP.

- Aging infrastructure and outdated technical and scientific equipment, much of it more than 20 years old, is constraining the Institute's ability to respond to country demands and carry out appropriate applied research. Furthermore, the Institute needs assistance in exploring ways to develop a more secure financial base, in order to assure maintenance of key personnel, high priority programs and activities on a continuing basis.

Therefore, while maintaining the technical focus of support for maternal-child health and food and nutrition programs, ROCAP will also further strengthen INCAP's technical capacity in: development of information systems; disease and program monitoring, evaluation and surveillance; operations and applied research techniques; policy analysis; and adaptation and use of new education and communications training methods and techniques. This will be done through long and short-term training for INCAP professionals, provision of consultants and technical assistance to the Institute and facilitation of linkages with U.S. universities and institutions of technical excellence. ROCAP will also fund essential technical equipment and infrastructure where necessary, and will assist INCAP in its exploration of a more diverse and secure financial base. This latter will include the establishment of an endowment or similar core budget support mechanism, greater sale of technical services and, improved grantsmanship for support of applied research.

#### B. Health Management and Administration Training

There is agreement among host governments and donors in the region that improved public administration and management is necessary to ensure sustainability and effectiveness of the strengthened national health systems (supported by AID bilateral missions health systems strengthening projects). Currently, however, there is no institution in the region capable of providing such training. There is also no common strategy to address the managerial sustainability problem. ROCAP proposes identification and clarification of needs through exploration of alternatives and design of long-term solutions.

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## VI. Implications for the ROCAP Portfolio

### A. Plan A Activities

#### 1. Project I: Technical Support to Maternal-Child Health and Food and Nutrition Programs

Plan A will include a major 12 million dollar follow-on project with INCAP focused on Maternal-Child Health and Food and Nutrition Programs. Projected start date is early FY 91, extending through FY 95. The project will strengthen national capacities in maternal-child health and food and nutrition programs aimed at increasing household food security in the subregion. This project will use INCAP as a means to strengthen and complement national and bilateral policies, planning, and coordination; policy analysis; surveillance; program implementation; public health education; and operations research in the two technical focus areas. In addition, through technical assistance, training and information dissemination, the project will strengthen INCAP's human resource base and technical skills in: information systems, monitoring/evaluation and epidemiological surveillance; applied and operations research; policy analysis; education, training and communications methods and techniques, and public health education. INCAP strengthening will be achieved through short and long-term training, provision of highly specialized technical assistance, and by encouraging further linkages with U.S. and other internationally-known universities and technical institutions. The project will also provide some technical infrastructure support, mostly equipment, to enhance research capacity and will assist INCAP in finding ways to broaden its core funding and diversify its financial base and funding sources.

The project will link INCAP with one or more U.S. technical assistance firms which will provide the specialized technical assistance required for strengthening INCAP, and will be available to provide assistance to the bilateral USAIDs in the region in health, food and nutrition. The project will be authorized at a level of 15-17 million dollars, leaving room for buy-ins by bilateral USAIDs in either dollars or local currency to obtain the services of INCAP, the U.S. contractors or a combination of the two, depending upon the nature of the task and the entity deemed best technically and politically suited to addressing it. The establishment of the buy-in mechanism will provide easy access to INCAP services, a current constraint and frequent request on the part of bilateral USAIDs. It can also help fill a need expressed by all of the health officers in the region for technical assistance for USAID related-functions through the project's U.S. contractors or, in cases such as evaluations or project design, through a combination of the two resources.

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## 2. Project II: Administration and Management Training

Starting in FY 1988/89, using PD&S, ROCAP help define a strategy for institutionalizing health care administration and management training in the region. A 2-3 million dollar project starting in 1990 will implement the strategy developed. The strategy will address management and administration training at various levels, including overall management and administration of public sector institutions such as the Ministries of Health, Social Security Institutions or major public or private hospitals as well as mid-level management (for example, on the regional or provincial level in a public health care system). In addition, it will address specific management training for specialized tasks like warehouse management, management of maintenance and repair units, public sector motorpools or logistics and supply systems. Issues such as health care financing, procurement of essential drugs and supplies and delivery of both preventive and curative services will be incorporated into the strategy as key elements in health care administration and management.

### B. Plan B Activities

1. Follow-up activities in establishing and institutionalizing health care management and administration training in the region;
2. Increased institutional support for INCAP, particularly for infrastructure and expanding core funding;
3. Follow-on technical assistance for essential drugs and supplies.

ANNEX A

ANNEX A, TABLE 1  
**MAJOR CONSTRAINTS IN HEALTH AND NUTRITION SECTOR AND COUNTRY-SPECIFIC DONOR ASSISTANCE EFFORTS**  
 (Based on Agency Health Objectives)

Objectives	Guatemala	Costa Rica	El Salvador	Honduras	Panama	Belize	Region
<b>A. Constraints to Improved Health and Health Systems</b>							
1. Insufficient Public Health Facilities	P		P, A/B	A/B, IDB			
2. Inadequate Maintenance, Repair	P/IDB		P, A/B	A/B, IDB	P		P
3. Insufficient Equipment	P		A/B	A/B		A/B	P
4. Deficient Policies	A/B, P, U	U, A/B, WB	U, A/B	U, P, A/B	U, P	U, A/B	U, P, A/R
5. Deficient Planning	A/B, P, U, A/W	U, A/B, WB	U, A/B, A/W	U, P, A/B, A/W	U, P	U, A/B	U, P, A/R, A/W
6. Inadequate Coordination	A/B, P, U	U	U, A/B	U, P, A/B	U, P	U, A/B	U, P, A/R
7. Inappropriate Distribution of Facilities			A/B	A/B			
8. Inappropriate Use and Distribution of HR			A/B	A/B			
9. Overcentralization	A/B, U, P	U	U, P, A/B	U, P, A/B	U, P	U, A/B	U, P
10. Insufficient PHC Focus	A/B, U, P	U	U, P, A/B	U, P, A/B	U, P	U	U, A/R, A/W
11. Insufficient Preventive Focus	A/B, U, P	U	U, P, A/B	U, P, A/B	U, P	U, A/B	U, A/R, A/W
12. Insufficient Outreach, Comun. Ed.	A/B, U, P	U	U, P, A/B	U, P, A/B	U, P	U, A/B	U, A/R, A/W
13. Inadequate Management Skills	A/B	A/B	A/B	P, A/B		A/B	P, A/R
14. Inadequate Training	P, A/B, U, A/W	U, A/B	U, A/B	U, P, A/B, A/W	U, P	U, A/B	U, P, A/R, A/W
15. Inadequate Public Health Education	A/B	A/B	P, A/B	A/B	P		P
16. Inadequate Information System	A/B, A/W	A/B	P, A/B	A/B, A/W		A/B	A/W, A/R
17. Inadequate Monit./Evaluation, Surveillance System	A/B		A/B	A/B	P		U, P, A/R
18. Insufficient Essential Drugs/Q Contr./Supply Syst.	P, A/B, U	U, A/B	U, P, A/B	U, P	U, P	U, P	U, P
19. Insufficient Critical Supplies, Logistics	A/B, U,	U	U, A/B	U, P, A/B	U, P	U, P	U
20. Inadequate Supervision	A/W, P, A/B		A/B	P, A/B	P		A/R

**KEY TO DONOR ASSISTANCE:**

P = PAHO AND DONOR COUNTRIES, INCAP  
 U = UNICEF AND DONOR COUNTRIES  
 A/B = AID BI-LATERAL  
 A/W = AID/WASHINGTON

A/R = ROCAP  
 WB = WORLD BANK  
 UN = UN HIGH COMMISSION ON REFUGEES  
 WFP = WORLD FOOD PROGRAM

ANNEX A, TABLE 1  
**MAJOR CONSTRAINTS IN HEALTH AND NUTRITION SECTOR AND COUNTRY-SPECIFIC DONOR ASSISTANCE EFFORTS**  
 (Based on Agency Health Objectives)

Objective	Guatemala	Costa Rica	El Salvador	Honduras	Panama	Belize	Region
21. Mass Media & Promotion	A/B, A/W, U	U	U, A/B, A/W	U, A/B, U/W	U	U, A/B	U, A/R, A/W
22. Lack of Operations Research	A/B, A/W	A/B, A/W	A/B, A/W	A/B, A/W			A/R, A/W
23. Inadequate Health Care Financing		A/B, WB	A/B	A/B, A/W			
24. Inappropriate Medical Education					P		
25. Inadequate Applied Research	A/B, A/W	A/W	A/W, A/B	A/B, A/W			A/R, A/W
26. Support to Biomedical, Socio-Economic, Cultural Knowledge about Basic Diseases	U	U	U	U, P, A/B	U, P	U, P	A/R, A/W
27. Low Coverage of High Risk Groups	P, U, A/B	U	U, P, A/B	A/B, IDB, U, P	U, P	U, P, A/B	U, A/R
<b>B. Constraints to Decreased Infant and Child Mortality and Morbidity</b>							
1. Diarrheal Disease	P, A/B, U, A/W	U	U, A/B	A/W, U, P, A/B	U, P	U, P, A/B	U, A/R, A/W
2. Immunizable Diseases	P, A/B, U, A/W	U	U, A/B	A/W, U, P, A/B	U, P	U, P, A/B	U, A/R, A/W
3. Undernutrition	P, U, A/W, WFP	U, WFP	U, P, A/B, WFP	A/W, U, P, A/B, WFP	U, P, WFP	U, P, A/B	U, A/R, A/W
4. ARI (Acute Respiratory Infections)	P, A/B, A/W		A/B	P, A/B, A/W	P	P, A/B	
5. Perinatal Problems		P	A/B	U, A/B, A/W		P, A/B	
6. Accidents and Trauma		A/B	A/B				
7. Malaria	P, A/W	A/W	P, A/B, A/W	P, A/B, A/W	A/W	A/B, A/W	P, A/R, A/W
8. Child Survival (Lack of Systems Support - Gen'l)	P, A/B, U, A/W	U	U, P, A/B	U, P, A/B, A/W	U, P	U, P, A/B	U, A/W, A/R
9. Alcohol and Drugs		P					
10. AIDS			A/B	A/B			
11. T.B.				A/B			

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ANNEX A, TABLE 1  
MAJOR CONSTRAINTS IN HEALTH AND NUTRITION SECTOR AND COUNTRY-SPECIFIC DONOR ASSISTANCE EFFORTS  
 (Based on Agency Health Objectives)

Title	Guatemala	Costa Rica	El Salvador	Honduras	Panama	Belize	Region
<b>C. Other Areas of Constraint</b>							
1. Lack of Water Supply and Sanitation	U, A/W, P, A/B	U, A/W, P	A/W, U, P, A/B	U, P, A/W A/B	U, P, A/W	U, A/B	U
2. Illiteracy				U			
3. Household Food Insecurity	U, WFP	U, WFP	U, A/B, WFP	U, WFP	U, P, WFP		A/R
4. High Risk Births	A/B, A/W, U P	U	A/B, U	U, P, A/B A/W	U, P	U, P, A/B	U, A/R A/W
5. Birth Spacing	A/B, A/W		A/B	U, A/B		P, A/B	
<b>D. Specific Targeting to High Risk Groups</b>							
1. Marginal Urban	U	U	U, P, A/B	U, P	U	U	U, A/R
2. Rural			P, A/B	A/B	P	A/B	A/R
3. Female Headed Households	U	U	U	U	U		
4. Children Under 5 Years	A/W, A/B, U, U, WFP P, WFP	U, WFP	U, A/B, WFP	U, P, A/W, WFP	U, P, WFP	U, P, A/B	A/W, U, A/R
5. Displaced	U		U, P, A/B				A/R
6. Refugees	UN			UN, WFP			
7. Pregnant/Lactating Women	A/B, WFP U, A/W, P	U, WFP	U, A/B, WFP	U, P, A/W, WFP	U, P, WFP	U, P, A/B	A/W, U A/R

**KEY TO DONOR ASSISTANCE:**

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 U = UNICEF AND DONOR COUNTRIES  
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 A/R = ROCAP  
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 UN = UN HIGH COMMISSION ON REFUGEES  
 WFP = WORLD FOOD PROGRAM

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ANNEX A, TABLE 2  
POTENTIAL AREAS FOR ROCAP ASSISTANCE ACCORDING TO AID MISSIONS, PAHO AND UNICEF

AREAS FOR ROCAP ASSISTANCE	Guatemala	Costa Rica*	El Salvador	Honduras	Panama	Belize	PAHO	UNICEF
<b>A. Constraints to Improved Health and Health Systems</b>								
1. Insufficient Public Health Facilities	-	-	-	-	-	-	-	-
2. Inadequate Maintenance, Repair	-	-	-	-	-	-	-	-
3. Insufficient Equipment	-	-	-	-	-	-	-	-
4. Deficient Policies	-	-	-	-	-	-	-	-
5. Deficient Planning	-	-	-	-	-	-	-	-
6. Inadequate Coordination	X	-	X	-	-	-	-	-
7. Inappropriate Distribution of Facilities	-	-	-	-	-	-	-	-
8. Inappropriate Use and Distribution of HR	-	-	-	-	-	-	-	-
9. Overcentralization	-	-	-	-	-	-	-	-
10. Insufficient PHC Focus	-	-	-	-	-	-	X	-
11. Insufficient Preventive Focus	-	-	-	-	-	-	X	-
12. Insufficient Outreach, Comun. Ed.	-	-	-	-	-	-	X	-
13. Inadequate Management Skills	X	-	X	X	-	X	-	-
14. Inadequate Training	X	-	X	X	-	X	-	-
						(Curr.Dev.)		
15. Inadequate Public Health Education	-	-	X	X	-	-	-	-
16. Inadequate Information System	X	-	X	-	-	X	-	-
17. Inadequate Monit./Evaluation, Surveillance System	X	-	X	X	-	X	-	-
18. Insufficient Essential Drugs/Q Control/Supply System	-	-	-	X	-	-	-	-
19. Insufficient Critical Supplies, Logistics	-	-	-	-	-	-	-	-
20. Inadequate Supervision	-	-	-	-	-	-	-	-

\*No Suggestions

ANNEX A, TABLE 2  
POTENTIAL AREAS FOR ROCAP ASSISTANCE ACCORDING TO AID MISSIONS, PAHO AND UNICEF

AREAS FOR ROCAP ASSISTANCE	Guatemala	Costa Rica*	El Salvador	Honduras	Panama	Belize	PAHO	UNICEF
21. Mass Media & Promotion	-	-	-	X (FP)	-	X (Social Market)	-	-
22. Inadequate Operations Research	-	-	-	-	-	-	-	-
23. Inadequate Health Care Financing	-	-	-	-	-	-	-	-
24. Inadequate Medical Education	-	-	-	-	-	-	-	-
25. Inadequate Applied Research	X	-	-	X	-	-	-	-
26. Support to Biomedical, Socio-Econ., Cultural Knowledge about Basic Diseases	-	-	X	-	-	-	-	-
27. Low Coverage of High Risk Groups	-	-	-	-	-	-	-	-
<b>B. Constraints to Decreased Infant and Child Mortality and Morbidity</b>								
1. Diarrheal Disease	-	-	-	-	-	X	-	-
2. Immunizable Diseases	-	-	-	-	-	X(Surv)	-	-
3. Undernutrition	X	-	X	X	-	X	-	X
4. ARI (Acute Respiratory Infections)	-	-	-	-	-	-	-	-
5. Perinatal Problems	-	-	-	-	-	-	-	-
6. Accidents and Trauma	-	-	-	-	-	-	-	-
7. Malaria	X (Surv)	-	-	X (Surv)	-	X	-	-
8. Child Survival (Lack of Systems Support - Genr'l)	X	-	-	-	-	-	-	-
9. Alcohol and Drugs	-	-	-	-	-	-	-	-
10. AIDS	-	-	-	-	-	-	-	-
11. T.B.	-	-	-	-	-	-	-	-

\*No Suggestions

ANNEX A, TABLE 2  
POTENTIAL AREAS FOR ROCAP ASSISTANCE ACCORDING TO AID MISSIONS, PAHO AND UNICEF

AREAS FOR ROCAP ASSISTANCE	Guatemala	Costa Rica*	El Salvador	Honduras	Panama	Belize	PAHO	UNICEF
<b>C. Other Areas of Constraint</b>								
1. Lack of Water Supply and Sanitation	-	-	-	-	-	-	X	X
2. Illiteracy	-	-	-	-	-	-	-	-
3. Household Food Insecurity	-	-	X	X	-	-	-	-
4. High Risk Births	X	-	-	-	-	-	-	-
5. Birth Spacing	X	-	-	-	-	-	-	-
<b>D. Other Areas for Assistance</b>								
1. TA to Missions for AID Administrative Support	X	-	-	X	-	X	-	-
2. Coord. Agric. & Nutri. Reg. Institutes	-	-	X	-	-	-	-	-
3. Displaced/Refugees	-	-	-	-	-	-	X	-
4. Operationalizing Research	-	-	-	-	-	-	-	X

\*No Suggestions

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ANNEX B

Costa Rica

Trends in Health and Nutrition

Over the past 15 years there has been a dramatic change in the pattern of illness in Costa Rica. High morbidity and mortality rates previously caused by diarrheal and respiratory infections have been replaced by a disease pattern more closely resembling that of the developed world: by 1983 cardiac disease, tumors and accidents had become the leading causes of death. Infant mortality dropped from 61.5 (per 1,000 live births) in 1970 to 16.2 in 1985, and child mortality rates went from 5.1 (per 1,000 children 1-4 years of age) to 1.0 in 1984 (1) (2) (3) (5). Life expectancy increased five years in the 15 year period (3) to 69.7 in 1975-80 (16).

The nutritional status of children under 6 years of age improved from 8.5% Grade II and 0.8% Grade III weight for age in 1966 to 2.9% Grade II and 0.2% Grade III in 1982 (6). In 1985, INCAP re-analyzed the 1982 nutrition data and found 6.1% of children under 6 to be at least 2 standard deviations below the mean in weight for age and 6.4% to be 2 standard deviations below the mean in height for age (6). Although 36 percent of the population is under 15 years of age, trends are toward a growing proportion of elderly and a contraction of the younger population (3).

By 1980, the leading causes of infant death were immaturity, perinatal illnesses and congenital anomalies, followed by respiratory infections and gastroenteritis. Undernutrition had increased in relative importance, and poisoning and trauma appeared as a new problem for this age group. The leading causes of death in children 1-5 years of age in 1980 were accidents, traumas and poisonings followed by respiratory infections and parasites, and infectious diseases (3).

Other health and nutrition problems of concern to Costa Rica are the following: Six cantones are at particularly high risk with poor socio-economic indicators and infant mortality rates twice the national average; the crisis in the subregion has generated special problems associated with a growing refugee population including re-emergence of a number of infectious and vector-borne diseases previously eradicated or reduced in importance and a high percentage of undernutrition among refugee children; and, according to reportable disease data from 1983, venereal disease is on the increase as are drug and alcohol abuse and homicides (3).

In the early 80's, the economic crisis affecting Central America also affected Costa Rica. While real GDP growth rate was 6.3% in 1978, growth dropped to a low of -7.3% in 1982. Since 1982, economic growth rates have gradually but erratically improved. Real GDP growth is estimated to be 2.5% in 1987, however inflation has been between 10% and 20% since 1985 and consumer prices in 1986 were over seven times those of 1985. Costa Rica also has the largest external debt/GDP ratio in the subregion at 96% in 1986, while debt servicing stands at 45% of export earnings (18).

The resulting reduction in public health expenditures, and drop in consumer buying power has led to some concern about a possible deterioration in the health status of the Costa Rican population over the next decade. Concern has been expressed in particular about marginal urban populations and the six cantones whose health indicators are considerably inferior to national figures.

#### Major Constraints

Costa Rica's Health Sector Overview (1985) provides a comprehensive look at major constraints in the health and nutrition sector. A brief description of these constraints includes the following:

##### 1. Sector economic contraction

In the decade of the 70's, Costa Rica's annual economic growth rate was strong at 6%, unemployment was low and expenditures in health were high. Health comprised 29% of public expenditures or 6.4% of the GDP, a percapita expenditure of \$US73. At the end of the decade, the Social Security health services claimed 93% population coverage, and the Ministry of Health was estimated to cover 90% of the high risk portion of the population. The economic crisis in Costa Rica led to a dramatic decrease in public health expenditures. Although health had risen to 9.2% of public expenditures by 1983, continued slow economic growth projected through the 90's will continue to restrain growth of public expenditures including that of the health sector.

##### 2. Influx of refugee populations and resurgence of infectious and immunizable diseases

As noted above, the conflict in the subregion has led to an influx of an estimated 250,000 refugees into Costa Rica alone. Vector borne, infectious diseases and undernutrition are re-emerging as health problems in areas of the country with substantial refugee populations. As yet no thorough, integrated mechanism for dealing with these health problems has been established.

### 3. Population growth and structural change

Although birth rates in Costa Rica have gradually declined over time, birth rates have not declined as rapidly as death rates, keeping population growth rate high, and placing an increasing burden on an already constricted health sector. There are also gradual but unmistakable changes in the population structure toward an aging population and a pattern of chronic illnesses which are expensive to treat.

### 4. Weaknesses in the public health sector

Recent changes in the size and structure of the system have adversely affected planning, administration, management, service delivery quality and information systems. In general this is due to overcentralization, inadequate coordination, excessive duplication and nonuniformity. Management constraints were identified as the major barrier to adequate service delivery in both the MOH and CCSS. Problems in management exist in organizational structure, human resource capabilities, management systems and financial resources. In 1983, a National Health Sector Council was created in order to bring about the integration and regionalization of Ministry of Health and Social Security services and develop a unified National Health Care System. Although this coordination exists at the national level, little has been accomplished in to date as success on the local level depends upon the inter-relationships and personal initiative of local health professionals.

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## El Salvador

### Trends and Constraints in Health and Nutrition

Over the past 55 years there has been a reduction in mortality in El Salvador overall. In the years proceeding socio-political turmoil and population displacement, crude death rates dropped from 30 (per 1,000) in 1930 to 10 in 1979. Infant mortality also sharply declined from 136 (per 1,000 live births) in 1960 (55) to estimates of 58 in 1978 (58), 60 in 1981 (60), 44 in 1983 (9), and 51 reported recently (10). Proportionate mortality for children under five dropped from 45% in 1966-70 to 24% in 1980 (8). Reductions in mortality during this time period increased life expectancy 20 years, from 40 in 1950 to 60 in 1980. Beginning in 1980 and up to the present time however, the conflict in El Salvador has produced a significant increase in mortality, particularly among adult males, raising crude mortality to 13.7 by 1984 (10). According to the most recent national survey, infant mortality rate was 67.7 in 1985 (10), a possible increase from the low rates reported for 1978-83 (10) (58) (60) (9) (possibly low due to under-reporting or poor data collection during this period), while proportionate mortality for children under 5 had risen from 24% in 1980 (57) to 45% in 1983 (9). Child mortality was estimated to be 6.8 (per 1,000 children 1-5 years of age) in 1981 (9). The increase in mortality in recent years has caused a decrease in life expectancy of 7 years since 1980 to 53 in 1984. Changes in mortality have been accompanied by rapid population growth since 1950 which has increased the relative percentage of children under 15 in the population (10).

Principal causes of infant death were intestinal infections, acute respiratory infection and complications during the perinatal period. Perinatal deaths were followed by intestinal infections, parasites and acute respiratory infections as main causes of death overall. In 1985, high morbidity and mortality rates were reported for immunizable illnesses, however current rates reflect a modest decline in reported cases due to national immunization campaign efforts in recent years.

The most recent nutritional status data dates from 1978 in rural areas. According to this information, 10% of children under 5 years of age were Grade II and 0.5% were Grade III (weight for age). INCAP re-analyzed this data into Z scores and found 17.9% of children under 5 years of age in rural areas to have had weight for age scores of under 2 standard deviations and 44.1% of have had height for age scores of under 2 standard deviations. (6)

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## Major Constraints

The following is a brief summary of constraints discussed in AID/TAC/P (n.d.) El Salvador Project Paper: Health Systems Support Project:

### 1. Economic constriction in the health sector

In the years preceeding the conflict and the subregional economic depression of the early 80s, the Ministry of Health was allocated a fairly substantial portion of the public budget. Between 1975 and 1979, the Ministry budget nearly doubled in size. In 1980, the Ministry was allocated 10.6% of the public budget. Since 1981, however, Ministry funding has fallen at the rate of up to 8% per year. By 1986, the Ministry portion of public funds had fallen to 7.1%. In addition, inflation has reduced Ministry purchasing power such that real expenditures fell by 50% between 1980 and 1985. In 1979, GOES issued a decree prohibiting direct purchases of equipment in all ministries. The shortfall resulting from budget cuts, inflation and restrictions has been met to a great extent by international donors. One negative consequence of this situation is dependency and a lack of incentive to improve resource allocation within the Ministry system. Another is the increase in recurrent costs to the health sector which follow certain projects completed by donor funding.

### 2. Inappropriate resource allocation

Although the health sector in El Salvador is based on a tiered system of service delivery, operational norms have not reflected this concept. Tasks which could be provided by lesser-trained, and lower-cost nurses and auxiliaries are reserved for physicians, who account for 25% of the three principle categories of care providers. This inappropriately high percentage of physicians is expected to persist until limitations on hiring new personnel are overcome and a solution is found to the current shortage of graduate nurses. A pilot project is underway in the western region to introduce new treatment norms which will address the inappropriate use of providers.

### 3. MOH management capability

Over the past five years instability in management has been the result of frequent changes in ministers and personnel on both central and regional levels. This situation has been exacerbated by highly centralized management processes and fragmentation of information flow which impedes coordination within the Ministry itself. In part, donors.

have been responsible for this situation as each follows it's own priorities, sometimes duplicating efforts or creating serious gaps in programming. In 1985, the MOH drafted its second Five Year Plan (1985-1989) which reflected a focus on primary health care, decentralization and community participation. Some progress has been made to date, particularly in decentralization.

#### 4. Infrastructure

The Ministry infrastructure is in relatively good condition, though primary and secondary levels are often in need of water and sewage systems and electricity, laboratories. The infrastructure has expanded since 1979 as a with the construction of 51 new facilities financed by IDB. Some structural damage was done to major facilities, however, during the earthquake.

#### 5. Logistical Support

Weaknesses in this system have caused drug and supply shortages and interruptions in service delivery. Weak areas include acquisition, distribution, and management of drugs, supplies and equipment.

#### 6. Socio-political conflict and population coverage

The Ministry of Health services are targeted toward the 85% of the country without access to health care through other institutions (Social Security, private and other providers). Estimates of actual health service coverage through the Ministry range from 30 to 50%. Much of the population uses home care or pharmacies before consulting public health personnel. In addition, 50 of the total 372 Ministry facilities were closed (1985) as a result of the conflict, all primary care facilities: health units, posts, community posts and dispensaries.

## Guatemala

### Trends in Health and Nutrition

Over the past 17 years, infant mortality in Guatemala has decreased substantially from 93 (per 1,000 live births) in 1965 to 63 in 1983 (13). A recent survey estimated infant mortality in rural areas to be 67.7 in 1985 (17), while child mortality was estimated to be 13 (per 1,000 children 1-5 years of age) in 1986 (15). This decrease in mortality has led to an increase in projected life expectancy from 42 years in 1950-55 to a present estimate of 62 years (16). In spite of this gradual decrease in mortality, however, Guatemala's rates remain some of the highest in the subregion (5). As with all countries, rates vary widely between areas and social classes. Of particular concern are those five or six areas of the country whose rates are much higher than the national average (16).

The five principle causes of death in children under five years of age are gastrointestinal infections followed by acute respiratory infections, complications of the perinatal period, immunizable illnesses (measles and whooping cough) and undernutrition (16). Principle causes of death in infants are respiratory infections, followed by enteric infections including enteritis and dysentery, and undernutrition (16). These have remained constant as causes of death in young children during the last decade, with respiratory and gastrointestinal infections vying for first and second place.

According to data available from national nutrition surveys, nutritional status of rural children under 5 years of age has not improved significantly over the past 20 years. In 1965, 21.1% of young children were Grade II and 3.4% were Grade III undernourished (weight for age); in 1978, 26% were found to be Grade II while 3.2% were Grade III (6). In 1985, this data was re-analyzed by INCAP as Z scores which showed an increase in the percentage of children under 5 from 36.5% (1965) to 43.6% (1978) with more than 2 standard deviations weight for age below the mean (6). Height for age percentages were also found to have increased from 50% more than 2 standard deviations below the mean in 1965 to 59.7% in 1978 (6). A recent survey of the rural areas in 1985 found 33.6% of children under 3 years of age to have Z scores of -2 standard deviations or more (17).

The economic deterioration affecting the subregion since the late 70's has had a strong effect on Guatemala resulting in increasing unemployment, inflation and an increase in poverty indices: consumer prices have nearly doubled in the past four years (18), while an estimated 31.6% of the population lived in extreme poverty by 1986 (16). Population

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growth rates show a projected increase from 8.2 million in 1985 to 12.2 million in the year 2000. The percentage of the population from 0-14 years of age is expected to contract only slightly from 45 to 43% (16).

### Major Constraints

The following factors have been identified in various documents as constraints to improving the health of the Guatemalan population:

#### 1. Insufficient resources in the health sector

The economic crisis in the subregion led to a decrease in the real GDP growth rate in Guatemala from 5.0% in 1978 to -3.5% in 1982. Since 1982, growth rates have improved erratically but gradually, with a reported 0.0% rate for 1986 and an estimated 2.0% for 1987 (18). External public debts represented 17.8% of the GDP in 1986 or 37.1% of total export earnings (18). Although public health sector expenditures have remained relatively steady at 7.7% of total public expenditures during the 1976-1985 period (16), the drop in economic growth accompanied by an average rate of inflation of 13.5% since 1980 and an increasing debt service burden have decreased both the amount available for the public health sector and its value in real terms.

#### 2. Weaknesses in the public health sector

Lack of funds allocated to public health have caused insufficiencies in numbers of facilities and health sector personnel. Existing resources are poorly managed and allocated with a disproportionate number of personnel and facilities located in urban areas (16). Deficiencies and duplication in the health information system prevent systematic use of information in program planning and evaluation, and programs tend toward a curative approach rather than one of prevention and high risk focus. (16) In spite of the lack of funds, there is little coordination of activities within the Ministry and between the social security health services and those of the MOH. (16)

#### 3. Low coverage and utilization

The MOH is estimated to provide coverage to 35% of the Guatemalan population (16). This low coverage figure is due, in part, to a lack of facilities and their poor physical distribution. It is also the result of poor utilization of services by the highest risk portion of the population, behavior influenced by a combination of factors including poverty, illiteracy, cultural and linguistic diversity (19).

## Honduras

### Trends in Health and Nutrition

Important improvements have occurred in the health of the Honduran population over the past decade, however major indicators remain some of the highest in the subregion (23) (20). In spite of a consistent decline in infant mortality, rates for the 80's are estimated to range from 71 to 85 (per 1,000 live births) (26). Infant mortality in 1985 was reported to be 78.6 (20). Child mortality for 1983 was estimated to be 7.4 (per 1,000 children 1-5 years of age), though under-reporting was suspected (5). High infant mortality was reported in particular for rural areas and the western departments, whose rates are over 110 per 1,000 live births (5) and among illiterate women whose rates are as high as 113 per 1,000 (24). Life expectancy was reported to have risen from 57.1 in the 1975-80 period (16) to 61.7 in 1985 (20).

The only information available on nutritional status of children in Honduras dates from 1966 when 18.4% were found to have Grade II and 1.3% had Grade III deficiencies in weight for age (6). Re-analysis of this data by INCAP in 1985 found 29.5% of children under 5 to have weight for age of 2 standard deviations below the mean, and 46.7% to have height for age deficiencies of more than 2 standard deviations below the mean (6). Annual rate of population growth is 3.6%, one of the highest in Latin America. The portion of the population under 15 years of age is 47%, presenting a problem of dependency similar to that of other countries in the subregion (23).

Principal causes of morbidity in all age groups in 1982 were intestinal parasites, followed by undefined intestinal infection, anemias, respiratory infections and undernutrition (23). Principal causes of mortality in 1983 were diarrheal infection, followed by heart disease, and pneumonia (23). Infant mortality was due primarily to intestinal infections, followed by complications of the perinatal period, short gestation and low birthweight, and respiratory infections (23).

The economy of Honduras has also been affected by the crisis in the subregion. Real GDP growth rate fell from 7.4% in 1978 to -2.6% in 1982. Since 1982, GDP growth rate has increased in real terms and remained steady at 3.0% since 1985 (18). Annual inflation has held around 4.5% since 1983 (18). Consumer prices in 1987 were twice those recorded for 1978 (18).

External debt was 70% of the GDP in 1986, while the debt service was nearly 27% of total exports (18). The economic crisis has resulted in an increase in unemployment and a drop in real income and consumption,

factors directly affecting the wellbeing of the rapidly expanding Honduran population (23).

### Major Constraints

#### 1. Contraction of the public health sector

The Ministry of Health budget decreased from 11% of the total public expenditure in 1982-84 to 9.3% in 1985 (22). Although GDP has continued to grow steadily, price increases have contributed to a decrease in the real funds available to the health sector. Current GOH policy recognizes the need use resources efficiently in all sectors because of fiscal constraints (27).

#### 2. Weaknesses in the health sector

In spite of the progress made by Health Sector I in strengthening MOH's malaria and Child Survival programs, logistic and maintenance structures, management, planning and development of human resources, problems in each of these areas still exist: there is inadequate implementation of follow-on supervision and support in local programming, cold chain and maintenance systems require further development and institutionalization, lack of an integrated general or program-specific information systems (with the exception of TB), inability to design and execute survey data collection or provide leadership through the Science and Technology Unit without external t.a., lack of essential drugs (public health facilities have only 35% of the required drugs on hand), and low quality training of auxiliary nurses.(27) There are also too few public health personnel distributed unequally among regions, with the majority in urban rather than rural areas (20).

#### 3. Low coverage of high risk groups

Basic population coverage increased from 1974 to 1978 with the construction of 179 rural health posts and 8 area hospitals (27). By 1986, coverage was estimated to be 70% (MOH 60%, IHSS 7%, private 3%) (20). Coverage of high risk groups in the rural and marginal urban areas, however, continues to need improvement (27). Analysis of coverage in 1980-83 showed a decrease due at least in part to increased unemployment and the economic crisis (20).

Panama

Trends in Health and Nutrition

Crude mortality rates in Panama have decreased slowly but steadily over the past two decades from 7.3 (per 1,000 inhabitants) in 1964 to 4.1 in 1983 (28). The quality of mortality data varies from region to region, however, with under-reporting in the Darien estimated to be 84.4% (28). Rates continue to be higher in rural areas than in urban areas (28). Infant mortality dropped from 37 (per 1,000 live births) in 1976 (33) to 26.9 in 1985 (5). Child mortality was reported to be 1.0 (per 1,000 children 1-5 years of age) for the same year (5). Life expectancy in the 1975-80 period was 69.6 years, a life expectancy similar to that of neighboring Costa Rica (16).

Since 1971, accidents, suicides and homicides, heart disease and malignant tumors have vied for first, second and third causes of death in Panama (33) (28). The impressive drop in mortality rates has been due primarily to the control of infectious disease, especially diarrheal infections and pneumonia in children 0-14 years of age (33). Infectious disease continues to be a problem for young children, however, in spite of the dramatic drop in rates. From 1981-84, infant mortality was due to complications of the perinatal period, followed by congenital anomalies, intestinal infection and pneumonia (28) (32). In 1983 and 1984, mortality in children 1-5 years of age was due to intestinal infections, followed by accidents, homicides and other violence, pneumonia, congenital anomalies, and respiratory problems (31) (28).

Gradual decrease in both crude birth rates and crude death rates have caused a gradual slowing in population growth. Rate of growth for the 1970-80 period was 2.6% while the population is said to be growing at the rate of 2.1% during the 1985-90 period (29). This tendency has been accompanied by a slight decrease in the proportion 0-5 years of age, and a gradual increase in those over 65 years (28). Nevertheless, Panama's population remains young with 38.7% of the population under 15 years of age in 1984 (28).

The nutritional status of young children in Panama did not improve and may have worsened between nutrition surveys implemented in 1967 and 1975. In 1967, 7% - 11.9% of children under 5 were found to have Grade II or Grade III deficiencies in weight for age (6), while 20% were found to have Grade II or Grade III weight for age deficiencies in 1975 (38). This corresponded to 15.8% more than 2 standard deviations below the mean in weight for age, and 22% more than 2 standard deviations below

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the mean in height for age in 1975 (38). Nutritional status of young children is worse in rural areas and some districts (35). A study of schoolchildren conducted in 1982 found six districts in the nation to have over 50% of first grade children with height for age scores at least 2 standard deviations below the mean (35).

Panama's economy was affected by the economic crisis in the subregion in the late 70's and early 80's, though not as severely as other countries. Real GDP growth rate fell from 9.8% in 1978 to a low of -0.4% in 1984. Economic growth was 2.8% in 1986. Annual inflation rose in 1980 from 7.9% to 11%, however recent annual rates of inflation have dropped down to 3%, and the consumer price index shows consumer prices to be only a little more than half again what they were in 1985. Panama's external debt, however, is one of the highest in the subregion, representing 76.4% of the GDP. Debt service was 31.1% of export earnings in 1986 (18).

#### Major Constraints

The following are major constraints to improving the health status of the population in Panama:

1. Contraction of the public health sector

The economic crisis in Panama has caused a slow-down of economic growth and an increase in the rate of inflation which, combined with a large external debt, has left less available in real terms for all sectors including that of public health (35). This has led the health sector to form an intersectoral commission designed to improve coordination of services, and focus efforts on more efficient use of existing resources (35).

2. Low coverage of high risk population groups

The lack of valid morbidity and mortality data for certain sections of the country has been noted above (35). Under-reporting of births has been reported to be up to 39.2% in some parts of the country, while under-reporting of deaths may reach 84.4%. (35). Access to public health facilities is limited in some areas of the country for cultural, economic (including internal migration), educational and geographical reasons (35).

3. Weaknesses in the public health sector

Although improvement have been made in the health of the Panamenian population in the last decade, a contraction of the economy has made it necessary to improve the efficient use of resources in the public

health sector. A systems efficiency study conducted in the division of Maternal-Child Health in 1985 found a scarcity of physical resources including materials and equipment, transportation and facilities, scarcity and inadequate distribution of personnel, an inadequate information system, little community participation, little coordination between the central, regional and local levels, need for continuing education and training of personnel, lack of essential supplies and inadequate maintenance of equipment (36).

## Belize

### Trends in Health and Nutrition

As in the rest of the subregion, there has been a gradual decline in mortality in Belize over the past 15 years. Crude death rate dropped from 6.8 (per 1,000 population) in 1970 (51) to 4.0 in 1985 (40), and infant mortality fell from 51.2 (per 1,000 live births) in 1970 (51) to 21.5 in 1985 (40). Child mortality was estimated to be 1.4 (per 1,000 children 1-5 years of age) in 1985 (5). Rates varied, of course, among areas and population groups. Two districts with infant mortality rates much higher than the national average are of particular concern (40).

Although there is some information about the nutritional status of young children in Belize since 1973, age groups and geographical areas vary making trends impossible to estimate (52). According to clinic records in 1979, 5.5% of children under 3 years of age had Grade II deficiencies in weight for age, while 0.7% were Grade III (5). Information from the Oral Rehydration Unit in Belize City showed no improvement in the dehydration status of patients seen from 1982 to 1984. Nearly twice as many patients were attended in 1984, and the percentage of moderate and severe cases remained at 4% and 0.2% respectively for both years (48).

Principal causes of death in Belize in 1985 were malignant neoplasms, followed by pneumonia, complications during the perinatal period, accidents and heart disease (40). From 1981 to 1985, intestinal infections fell from 8th to 33rd cause of death, while pneumonia remained the second cause of death (43) (40). Recent changes in the mortality pattern show a tendency towards chronic conditions among the elderly (47). The re-emergence of malaria and introduction and expansion of *P. falciparum* and *P. vivax* in Belize continue to be a concern in spite of recent declines in incidence since 1984 (47). Intestinal infections, respiratory infections, and complications during the perinatal period have continued to be the main causes of death in children under 5 throughout the last decade (43) (40).

Belize's population is increasing at the rate of 3% per year, with the highest rates in rural areas (43). The population is young; children under 15 years of age represented 46% of the population in 1980 (43). Half of the population in Belize is urban, though the rural portion of the population grew at a rate three times that of the urban area during the 1970-80 period. As in the rest of the subregion, the socio-political crisis in neighboring countries has caused an influx of refugees in recent years. Although estimates of the size of this group have been estimated to be nearly 16,000 (1984) (42), the actual size of the refugee population is unknown.

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Belize has also been affected by the economic crisis in the subregion. In 1978, the real GDP growth rate was 2.7%. By 1982, growth had dropped to -4.9%. Since 1982, Belize's GDP growth rate has improved erratically but consistently, registering 2.5% in 1986 (18). Inflation rose to a high of 18.2% (1980) during the same period, however rates have slowed since then with an inflation rate of 2.5% reported for 1986. Consumer prices in 1986 were a little less than half again those reported for 1980 (18). In 1986, the external debt had risen to 49% of the GDP, a percentage similar to that of El Salvador. Debt service ratio to export earnings was by far the lowest in the region in 1986 at 9.9% (18).

### Major Constraints

#### 1. Stagnation of the public health sector

Although the percentage of public expenditures attributed to health increased from 8% in 1974 to 10% in 1977 (43), since the economic crisis public health expenditure has not increased in real terms. This situation is expected to continue into the near future (47).

#### 2. Weaknesses in the public health sector:

Areas which need strengthening in the Ministry of Health include training of personnel in technical areas and management, more efficient use of resources and focus on local needs, more integration of preventive and curative health care, coordination between divisions within the Ministry, improved planning, policy formation and evaluation of programs, and maintenance of equipment and facilities (43).

#### 3. Ethnic diversity

At least five distinct ethnic groups make up the population of Belize. Although over 90% of the population is literate in English, the official language, 50% prefer English/Creole, 31.6% prefer speaking Spanish, 11.4% prefer speaking a Mayan language (Mopan, Kekchi), 6% speak Garifuna, and nearly 9% speak German (45). This diversity of languages implies a diversity of concepts and practices related to health which, while enriching Belize culturally, also makes provision of health care much more complex.

#### 4. Influx of a refugees

The influx of an estimated 16,000 refugees from neighboring countries in recent years has increased demands upon the health sector. As numbers of refugees and the demographic structure of the refugee



population are unknown, the Ministry of Health in Belize calculates it's need for supplies and materials based upon population projections from the last census, a practice resulting in subestimations of need and shortfalls on the local program level.

##### 5. Environmental constraints

There are numerous constraints to improving the health of the Belizian population, some of which fall within the scope of the health sector and others of which do not. Inflation and rising consumer prices in recent years have reduced buying power, 90% of housing is reported to be of poor, questionable or very poor quality and overcrowding is a problem, in 1980 there was 14.3% unemployment nation-wide (43), and in rural areas only 49% of the population has easy access to a supply of potable water (47). Fortunately, literacy level is very high at 93% (43).

Table 1  
Ongoing and Planned Health and Nutrition Projects in Costa Rica by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>PAHO</u>				
CORHS04 Prevention of alcoholism and drug abuse in priority groups (CEA)	2,541.20	5.0	2,546.20	
CORFN04 Flouridation of salt for prevention of dental caries (Kellogg Foundation)	429.00	487.60	916.60	
CORCS01 Program of regionalized perinatal care with high risk focus (CEE/Italy)	649.50	1,769.00	2,418.50	
CORWS04 Third stage of urban plan, fourth stage of rural aquaducts (IDB)	14,461.90	28,934.10	43,396.00	
CORWS05 Rural sanitation for three health regions (donor?)	701.90	92.20	794.10	
<u>USAID/CR</u>				
515-0190 Policy Planning and Administrative Improvement		1,300.0		
515-0238 Emergency Medical Services Manpower Development (Hope)		600.00	600.00	87-88
515-1000 Central American Peace Scholarships		354.00	354.00	
515-0203 Health Services Support	20,000.00	10,000.00	30,000.00	83-88
<u>USAID/W</u>				
<u>PRICOR II</u>				
<u>WASH</u>				
<u>UNICEF</u>				
I201 Child Survival (Italy, EEC)		1,622.60	1,622.20	87-99
		(1,769.00	1,769.00	86-90)
W208 Water and Sanitation (Canada)		207.40	207.40	87-88
U206 Urban (Norway, Netherlands)		149.50	149.50	87
F207 Women in Development (France)		230.00	230.00	87-88
UNICEF General Funds (UN)		250.00	250.00	87-91
<u>World Bank</u>				
TA policy and planning for health care financing and service delivery		2,000.00	2,000.00	

Table 2  
Ongoing and Planned Health and Nutrition Projects in El Salvador by  
Donor Agency, as of Nov., 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>IAHO</u>				
ELSHS01 Administrative decentralization, phase III (USAID)	13.20	15.12	28.32	
ELSHS02 Implementation of the computer system(USAID)	4.80	13.64	18.44	
ELSHS03 Development of a maintenance system(USAID)	240.00	800.00	1,040.00	
ELSHS04 Construction of the Rosales Hospital(USAID)	200.00	2,000.00	2,200.00	
ELSHS05 Substitution of the health center in Suchitoto(USAID)	56.00	560.00	616.00	
ELSHS06 Remodeling the central offices of the MOH (USAID)	27.00	150.00	177.00	
ELSHS07 Sewage treatment pond at the Pneumological Hosp. (USAID)	10.00	55.00	65.00	
ELSHS08 Remodeling the surgery rooms at the Rosales Hosp. (donor?)	90.00	400.00	490.00	
ELSHS09 Construction of the health center, Ahuachapan, phase 2(USAID)	60.00	500.00	560.00	
ELSHS20 Reconstruction and remodeling of health units, San Jacinto and San Miguelito (Holand)	35.00	350.00	385.00	
ELSHS21 Reconstruction of health units, Delgado and Mejicanos(Chile)	5.00	50.00	55.00	
ELSHS22 Substitution of the health unit, Cuscatlancingo (Belgium)	24.00	240.00	264.00	
ELSHS24 Development of a program rural community health (W.Germ)	140.00	1,400.00	1,540.00	
ELSHR02 Educational formation of public health personnel (Spain)	960.00	20.00	980.00	
ELSED03 Supply system for essential drugs (USAID)	150.00	281.00	431.00	
ELSED04 Quality control of essential drugs (USAID)	500.00	335.00	835.00	
ELSTD01 Drainage and cleaning of tidelands and lagoons (USAID)	50.00	60.00	110.00	
ELSTD02 Construction of anti-malaria engineering works, Tiquiziapa and others (USAID)	480.00	200.00	680.00	

Table 2 (cont.)  
Ongoing and Planned Health and Nutrition Projects in El Salvador by  
Donor Agency, as of Nov., 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>FAHO cont.</u>				
ELSCS01 Control of growth and development in CS (CEE/Italy)	12,000.00	2,677.00	14,677.00	
ELSW04 Provision of potable water and sanitation to high risk populations (PNUD)	350.00	900.00	1,250.00	
ELSW11 Introduction of rural aqueducts (IDB)	7,000.0	21,000.00	28,000.00	
ELSW14 Rio Lempa project to provide water to metro San Salvador (IDB)	9,400.00	82,500.00	91,900.00	
<u>USAID/ES</u>				
519-0329 Maternal and child health promotion (CAIMA)		220.00	220.00	86-89
519-0281 Health and jobs for displaced families	1,941.00	63,000.00	64,941.00	82-88
519-0308 Health systems supp.	31,586.00	48,000.00	79,586.00	86-91
519-0300 Community-based integrated rural dev. (Save the Children) (UNICEF)	985.00	5,193.00	6,088.00	85-90
519-0324 Potable water, environmental sanitation		20,000.00	20,000.00	
519-0340 Private sector health care financing (proposed)		19,500.00	19,500.00	89 -
519-LC-28 Health systems vit.*		336.00	336.00	unspec
519-LC-29 Health systems support*		908.00	908.00	
519-LC-30 Logistic support to the Ministry of Health*		20.00	20.00	
519-LC-31 Nutrition*		40.00	40.00	
519-LC-32 Drug management*		56.00	56.00	
519-LC-33 Rosales Hospital*		400.00	400.00	
519-LC-34 Rural health prog. (PROSAR)*		40.00	40.00	
519-LC-35 Malaria control*		52.00	52.00	
519-LC-36 Rural health assistance*		32.00	32.00	
519-LC-37 Medical attention to Tugurios*		40.00	40.00	
519-LC-38 Remodeling, rehabilitating and equipping hospitals and health centers*		600.00	600.00	

Ongoing and Planned Health and Nutrition Projects in El Salvador by  
Donor Agency, as of Nov., 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>USAID/ES</u>				
519-LC-39 Schools and health centers on haciendas*		80.00	80.00	
519-LC-42 Child survival*		12.00	12.00	86-89
519-LC-73 Salvadorean Rehab. Inst. (ISRI)*		20.00	20.00	
Strengthening Rehab. Serv(Teleton)		2,450.00	2,450.00	87-90
<u>USAID/W</u>				
REACH Health Services Reconstr. (to date)		12.30	12.30	
PRITECH II		monitor only		
WASH				
PRICOR II				
HEALTHCOM				
VBC				
<u>UNICEF</u>				
I401 Child Survival (Italy, EEC)		4,588.00	4,588.00	87-90
		(5,028.00)	5,028.00)	
Z302 Integrated Child Dev. (Canada)		54.30	54.30	87
F509 Women in Development (France)		10.00	10.00	87
M319 Emergency (displaced) (Belgium, Japan, Sweden)		36.40	36.40	87
M317 Rehabilitation (UK)		18.50	18.50	87
M316 TA NGO (earthquake) (Norway)		50.00	50.00	87
S315 Displaced Family (Canada)		261.90	261.90	87-88
H310 Relief and Rehab. (Spain)		4.00	4.00	87
W314 Basic Sanit., Latrines (Spain)		158.70	158.70	87
General funds (UN)		582.00	582.00	87-90

\*LC funds have been converted to US\$ at C5/1US\$

Table 3  
Ongoing and Planned Health and Nutrition Projects in Guatemala by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>FAHO</u>				
GUTHS01 Equipment for 18 hospitals, 50 centros y 50 puestos de salud in the interior(Italy)	0.00	10,000.00	10,000.00	
GUTHS04 Strengthening the maintenance division(IDB)	0.00	320.00	320.00	
GUTHS05 Equipment for hospitals (France)	0.00	11,000.00	11,000.00	
GUTHS06 Equipment for the Roosevelt Hospital(France)	0.00	3,500.00	3,500.00	
GUTHS14 Development of physical capacity project (CARE) (Canada)	400.00	300.00	300.00	
GUTED02 Quality control of medicines (PNUD/OPS/OMS)	3,050.00	538.00	3,588.00	
GUTTD01 Malaria control (IDB)	6,405.20	100.00	6,505.20	
GUTCS01 Child Survival (CEE/Italy)	3,071.00	6,481.00	9,552.00	
GUTCS02 Expanded prog. of immunizations and ORT(USAID)	2,963.00	6,700.00	3,663.00	
GUIWS01 Emergency plan, subterranean water in the Valley of Guatemala(Japan)	4,960.00	16,000.00	20,960.00	
GUIWS05 Strengthening of the water and sanitation sector(PNUD)	240.00	398.00	638.00	
<u>USAID/G</u>				
520-0288 Expansion of Family Planning Services	6,886.00	12,600.00	19,486.00	82-88
520-0298 Rural Potable Water and Sanitation	1,302.00	500.00	1,802.00	84-86
520-0336 Rural Water Project	1,451.00	1,000.00	2,451.00	85-88
520-0251 Community Based Integrated Health and Nutrition Systems	8,347.00	9,644.00	17,991.00	80-88
520-0335 Rural Potable Water and Sanitation II	4,190.00	1,000.00	5,190.00	85-88

Table 3 (cont.)  
Ongoing and Planned Health and Nutrition Projects in Guatemala by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>USAID/G</u>				
520-0339 Immunization and Oral Rehydration Therapy Services for Child Survival	17,158.00	16,418.00	33,576.00	85-91
<u>USAID/W</u>				
<u>HEALTHCOM</u>				
<u>PRICOR II</u>				
PRITECH II intermittent	0.00	300.00	300.00	88-92
REACH	0.00	3,039.00	3,039.00	to date
<u>WASH</u>				
CDC TA for Child Survival				
Pop. demog. health survey				
SUPPORT TA on ORI				
PATH Oper. research for Child Survival				
<u>UNICEF</u>				
I601 Child Survival (Italy,EEC)		5,915.00	5,915.00	87-90
		(6,481.00	6,481.00	86-90)
W405 Water and Sanitation (Canada)		1,202.69	1,202.60	87-92
U410 Urban (Norway)		466.40	466.40	87
F412 Women in Development (France)		396.70	396.70	87-88
S409 Displaced (US Comm. on the Displ.)		360.10	360.10	86-87
H415 Trad. Birth Attend. (Spain)		250.00	250.00	87
UNICEF General Funds (UN)		2,176.00	2,176.00	87-91

Table 4  
Ongoing and Planned Health and Nutrition Projects in Honduras by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>FAHO</u>				
HONHR02 Permanent education for health personnel (USAID)	735.00	525.00	1,260.00	
HONTD03 Development of an integral program for the prevention of malaria (USAID)	10,688.00	1,597.00	12,285.00	
HONCS01 Child Survival (Italy)	1,000.00	4,271.00	5,271.00	
HONWS02 Collection of surface water (Italy)	5,440.00	1,701.00	7,141.00	
HONWS05 Design and construct. of 27 aquaducts and 3 urban sewage systems (FIDA)	1,000.00	290.00	1,290.00	
<u>USAID/H</u>				
522-0153 Health Sector I	17,900.00	34,914.00	52,814.00	80-88
522-LC-0153 Hlth Sector I*		8,530.00	8,530.00	80-88
522-0166 Rural water and Sanitation	10,462.00	20,924.00	31,286.00	80-87
522-LC-0166 Rural water/sanit*		5,231.00	5,231.00	80-87
522-0216 Health Sector II		50,000.00	50,000.00	88-93
522-0303 Community Health Self Motivation Program	100.00	400.00	500.00	85-88
<u>USAID/W</u>				
<u>HEALTHCOM</u>				
<u>PRICOR II</u>				
PRITECH II intermittent		400.00	400.00	88-92
REACH HCF/Admin/Soc Anal for PP		45,591.00	45,591.00	to date
<u>WASH</u>				
<u>UNICEF</u>				
I501 Child Survival (Italy, EEC)		3,926.00	3,926.00	87-90
		(4,271.00	4,271.00	86-90)
I502 Breastfeeding (OPEC)		62.70	62.70	87
E510 Adult literacy (Canada)		73.90	73.90	87
U506 Urban (Canada)		249.90	249.90	87-88
W514 Water and sanit. (Italy)		900.00	900.00	87-89
F509 Women in Development (France)		137.00	137.00	87-90
UNICEF General funds		1,300.00	1,300.00	87-90

\* LC converted to US\$ at 2L/1US\$



Table 5  
Ongoing and Planned Health and Nutrition Projects in Panama by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>PAHO</u>				
PANHS14 Training and design of a national maintenance prog. in health (IDB)	530.00	880.00	1,410.00	
PANHR05 Creation of a school of public health (Rockefeller)	280.00	1,548.00	1,828.00	
PANHR06 Support to the faculty of the nursing school, Univ. of Panama (FNUAP)	0.00	150.00	150.00	
PANED04 Improvement of the registration and control of ess. drugs (USAID)	250.00	250.00	500.00	
PANED05 Development of a supply system for Soc. Sec. essential drugs (USAID/Holland/Spain)	288.00	560.00	848.00	
PANFN03 Flouridation of salt (EEC/INCAP)	78.00	6.00	84.00	
PANFN05 Multisectorial system of food and nutr. surveillance (EEC/INCAP)	805.00	19.00	824.00	
PANFN07 Food production in high risk communities (EEC/INCAP)	4,541.00	11.00	4,552.00	
PANFN09 First Lady's national food production and distribution program (INCAP)	320.00	70.00	390.00	
PANCS01 Child Survival (EEC/Italy, INCAP, AGFUND, Rotary)	754.00	1,769.00	2,523.00	
PANCS11 Maternal-Child coverage (FNUAP)	150.00	89.00	239.00	
PANWS11 New rural aquaduct prog. 27 aquaducts (?)	525.00	988.00	1,513.00	
PANWS12 Other rural aquaducts (?)	100.00	438.00	538.00	

USAID/P  
none

USAID/W  
none

Table 5  
Ongoing and Planned Health and Nutrition Projects in Panama by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

<u>Donors and Projects</u>	<u>Local</u>	<u>External</u>	<u>Total</u>	<u>Period</u>
<u>UNICEF</u>				
I701 Child Survival(Italy, EEC)		1,532.00	1,532.00	87-90
		(1,769.00	1,769.00	86-90)
U702 Urban (Norway, Spain)		132.00	123.00	87-88
F705 Women in Development (France)		200.00	200.00	87-88
UNICEF General funds (UN)		250.00	250.00	87-88

Table 6  
Ongoing and Planned Health and Nutrition Projects in Belize by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>PAHO</u>				
BELED01 Rotating drug fund (FORMED)		100.00	100.00	
BELCS01 Growth monitoring and infant feeding (EEC/Italy)	0.00	104.30	104.30	
BELCS02 Control of diarrheal infections (EEC/Italy)	0.00	81.40	81.40	
BELCS03 Immunization(EEC/Italy)	0.00	100.40	100.40	
BELCS04 Control of acute resp. Infections (EEC/Italy)	0.00	67.90	67.90	
BELCS05 Risk focus and family spacing (EEC/Italy)	0.00	137.30	137.30	
BELCS06 Logistics and salary support (EEC/Italy)	0.00	117.60	117.60	
<u>USAID/B</u>				
505-0017 Child Survival Tech. Support (Proj. Hope)	167.00	500.00	667.00	86-88
505-0029 Breastfeeding Out- reach (BIB League)	42.50	62.00	104.50	85-88
505-0032 Maternal and Child Health (CARE)	365.00	250.00	615.00	86-88
505-0018 Increased Productivity through Better Health(PRAGMA)	3,574.00	7,000.00	10,574.00	85-89
505-0024 Village Level Water and Sanitation (CARE)	600.00	700.00	1,300.00	84-86
505-0031 Belize Family Life Education	70.40	97.50	167.90	85-88
505-? Child Survival Support (CARE/Hope) (proposed)		2,000.00	2,000.00	88-92
<u>USAID/W</u>				
none				
<u>UNICEF</u>				
IL01 Child Survival (Italy, EEC)		380.40	380.40	87-90
		(408.00)	408.00	86-90)
H102 School Health Ed (Norway)		95.00	95.00	87
W104 Water and Sanitation (Canada)		168.30	168.30	87
U106 Urban (Canada)		115.40	115.40	87
RI12 Integ. Basic Services (Canada)		267.70	267.70	87-89
UNICEF General Funds (UN)		200.00	200.00	87-90

Table 7  
Ongoing and Planned Subregional Health and Nutrition Projects by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>FAHO</u>				
REHS01 Organization of the health services (Holland)	0.00	3,000.00	3,000.00	87-92
REHS02 Training and exchange of maintenance technology (France)	0.00	71.00	71.00	87-91
REHS05 Training needs in CA/P: PASSCAP (USAID)	0.00	56.00	56.00	88
REHR01 Education and training in public health (Spain)	196.00	2,000.00	2,196.00	87-92
REED01 Development and Coord. of subregional policies on essential drugs (France)	200.00	140.00	340.00	87-88
REED02/03 Quality control and provision of pharmaceuticals and other critical supplies (USAID)	3,310.00	6,000.00	9,310.00	85-89
REED04 National production of essential medicines and other critical supplies (Norway)	712.00	663.00	1,375.00	87-90
REED05 Cooperative purchasing of essential medicines, raw materials and other critical supplies (Holland, Switzerland)	60.00	10,000.00	10,060.00	86-90
REFN02 Education and training of human resources (Switz.) (INCAP)	0.00	3,300.00	3,300.00	87-90
REFN04 Food and nutrition education (France) (INCAP)	8,179.30	400.00	8,579.30	87-88
RETD01 Epidemiological surveillance and lab equip. for Honduras, Guatemala, Nicaragua and El Salvador (IDB)	28,034.40	400.00	28,434.40	n.d.
RETD02 Training in research and institutional strengthening in malaria programs (USAID) (IDB)	0.00	4,140.00	4,140.00	n.d.
Subregional technical coop.	0.00	38,377.30	38,377.30	84-89
<u>USAID/ROCAP</u>				
596-0116 Technical Support for Food Assistance Progs.	1,733.00	6,100.00	7,833.00	85-90
596-0115 ORT, Growth Monit. and Nutrition Education	2,630.00	9,000.00	12,030.00	84-90

Table 7 (cont.)  
Ongoing and Planned Subregional Health and Nutrition Projects by  
Donor Agency as of Nov. 1987  
(amounts in US\$ 000.0)

Donors and Projects	Local	External	Total	Period
<u>USAID/W</u>				
<u>HEALTHCOM</u>				
PRICOR II				
PRITECH II ad hoc (INCAP)	0.00	250.00	250.00	88-92
REACH				
WASH				
<u>UNICEF</u>				
I801 Child Survival (Italy, EEC)		2,000.00	2,000.00	87-90
		(1,700.00	1,700.00	86-90)
Technical cooperation in Child Survival		4,576.00	4,576.00	86-90
I805 Monitoring and Evaluation (Sweden)		392.20	392.20	87
U802 Urban (Canada, Netherlands, Norway				
Spain)		230.00	230.00	87-88
- Women's Education, Child Surv. (Norway)		1,500.00	1,500.00	87-88
S803 Disabled (Canada, Mexico, UK, Jersey)		313.80	313.80	87-88
- Women in Development (France)		87.00	87.00	88

ANNEX C

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ANNEX D

## ANNEX D

### HUNGER AND MALNUTRITION

Malnutrition and food deficits are widespread in Central America. The Governments of Guatemala and Honduras report that 80% of all preschool age children in these countries suffer from some form of malnutrition. In Guatemala, 25-32% of children in that age group are moderately to severely malnourished. In addition, the Guatemalan Government reports that pregnant and lactating mothers from lower income groups consume only 60-65% of recommended minimum amounts of calories and proteins. As Table 1 shows, more than 20% of the children under five in El Salvador, Guatemala and Panama are two standard deviations below the mean height-for-age in the WHO standard population. Tables 2a and b illustrate the malnutrition/food deficit problem another way. In 1973, less than half of the populations of El Salvador, Guatemala, Honduras and Panama consumed the FAO/WHO recommended daily caloric intake levels. By 1979-81, the average daily per capita calorie availability based on production was above the recommended FAO/WHO calorie levels in Costa Rica and Panama, and below recommended levels in El Salvador, Guatemala and Honduras. Although there had been some increases in calorie availabilities by 1985, the overall situation had changed little. However, average daily per capita calorie availability does not reflect actual calorie intake, for which data are unavailable, nor does it reflect the wide variation that exists in all the countries in the actual amounts available to each of the various socioeconomic groups. It is therefore likely that the poorer socioeconomic groups consume far less than the FAO/WHO recommended levels.

TABLE 1

Proportion of Preschool Age Children in Central America Who Fall Two  
Standard Deviations Below WHO Reference Population: Height for Age  
1982

<u>Country</u>	<u>Proportion (Percent)</u>
Costa Rica	6.4
El Salvador	44.1
Guatemala	59.7
Honduras	Recent Information Unavailable
Panama	25.1

Source: Hernán Delgado, La Situación Alimentaria Nutricional en Centroamérica  
y Panamá, Nutrition Institute for Central America and Panama, 1987.

TABLE 2a

Calorie Availability and Consumption in Central America and Panama  
1973

<u>Country</u>	<u>FAO/WHO Recommended Calorie Requirements</u> <u>(KCal)</u>	<u>Percentage of Population Consuming Recommended Level</u>
Costa Rica	2,240	66
El Salvador	2,290	28
Guatemala	2,190	31
Honduras	2,260	40
Panama	2,310	49

Source: Indicators of Nutrition in AID Assisted Countries, Statistical Profile Series, S&T/Development Information and Utilization, Economic and Social Data Services Division, 1982.

TABLE 2b

Calorie Availability as Percentage of Recommended Daily Calorie Requirements in Central America and Panama: 1981-85

<u>Country</u>	<u>FAO/WHO Recommended Calorie Requirements (KCal.) (1985)</u>	<u>Average Daily Per Capita Availability of Calories (KCal.)</u>	
		<u>1981 (% of req.)</u>	<u>1985 (% req.)</u>
Costa Rica	2,310	2,621 (113)	2,772 (120)
El Salvador	2,287	2,120 ( 93)	2,104 ( 92)
Guatemala	2,322	2,221 ( 96)	2,299 ( 99)
Honduras	2,301	2,197 ( 95)	2,209 ( 96)
Panama	2,304	2,322 (101)	2,420 (105)

Adapted from: Programas Alimentarios Nacionales en America Latina y el Caribe: Una Respuesta a la Crisis Economica, 1986 and 1987 reports of the Secretariat of the Action Committee for Regional Food Security (CASAR).

One major contributing factor is the state of agriculture in Central America and Panama. In recent decades, there have been improvements in some areas. For example, land area dedicated to agriculture has increased (see Table 3) and improved technological packages have reached farmers. Consequently, there has been an increase in agricultural production in the region over the last few decades. However, the region has many structural constraints that limit food production. Among these are inequitable land distribution, high un- and underemployment in rural areas, large expanses of land planted in exportable crops and small holdings dedicated to subsistence agriculture, population pressure, lack of land distribution programs and a lack of support for the small farmer.

TABLE 3

Changes in Land Area Cultivated in Basic Grains (Corn, Dry Beans, Rice and Sorghum): 1973-83

<u>Country</u>	<u>% Rates of Increase (Decrease)</u>		
	<u>1973-77</u>	<u>1977-81</u>	<u>1981-83</u>
Costa Rica	2.5	0.6	10.5
El Salvador	(3.5)	8.1	2.6
Guatemala	(4.8)	1.1	11.9
Honduras	9.6	(6.1)	(1.9)
Panama	1.9	(4.3)	(2.8)
Overall	(0.3)	0.3	4.6

Adapted from: A. Reyes-Pacheco, Seguridad Alimentaria: Una Agenda para Centroamerica y Panama, Inter-American Institute for Cooperation in Agriculture (IICA), 1986.

Coupled with the other constraints that limit food production, the rate and pattern of population growth in all countries in the region have had a profound effect on per capita food production. The overall regional population growth rate is about 2.6% per year, ranging from Honduras' 3.5% to Panama's 2.2%, according to Delgado and Reyes-Pacheco. However, the rural population grew only 1.9% during this time. As a result, while the number of agricultural sector workers is increasing in absolute terms, the proportion of agricultural workers to the total number of people to be fed is decreasing. The consequences of these trends have already begun to be felt. From 1979 to 1983, according to Reyes-Pacheco, per capita food production fell by more than 5% per year in El Salvador, 3% in Guatemala and 1.25% in Costa Rica, rising by only 0.25% per year in Honduras and Panama. Moreover, the droughts of the 1986 crop year, which greatly reduced food crop production, have almost certainly caused per capita food production to decrease even further, given that the population growth rate remains high.

Food deficits that will need to be met by food aid are expected to persist at least until 1990. The Economic Research Service of the U.S. Department of Agriculture has reported that cereal production was expected to be 2,865,000 Metric Tons (MT) in 1987-88 and 2,880,000 MT in 1988-89. However, to meet the needs suggested by the historical consumption pattern in Central America (the "status quo" level, in AID/FVA food needs assessment terminology), 3,723,000 MT would have to be produced in 1987-88, and 3,829,000 MT in 1988-89. In addition, to produce sufficient grain to meet the population's minimum energy requirement (the "nutrition based" level per food needs assessment terminology), 3,965,000 MT and 4,072,000 MT would have to be produced respectively. Some of the difference between production and needs will be met through stocks and commercial food imports. Nevertheless, 220,000 MT in addition to stocks and imports will be needed to meet status quo needs in both 1987-88 and 1988-89. To meet nutrition-based needs in 1987-88 and 1988-89, 469,000 MT and 461,000 MT will be needed, respectively (see Table 4 for individual country figures).

Another major constraint to Central American families in meeting their food needs is the inability of many families to purchase basic foods, even when they are available. According to the United Nations Economic Commission For Latin America and the Caribbean (CEPAL), as reported by Delgado, in 1980, the percentage of Central American families in extreme poverty or who could not meet basic needs were:

Costa Rica	24.8 (13.6 in extreme poverty)
El Salvador	68.1 (50.6 in extreme poverty)
Guatemala	71.1 (39.6 in extreme poverty)
Honduras	68.2 (56.7 in extreme poverty)
Panama	53.9 (not disaggregated)

"Extreme poverty" means total income insufficient to purchase the basic food basket as defined by the FAO, CEPAL and other organizations.

"Unable to meet basic needs" means more than 50% of total income needed to purchase the basic food basket.



TABLE 4

Projected Grain Production and Additional Needs to Support Consumption:  
1987-88 and 1988-89

<u>Country</u>	<u>Additional Needs to Support</u>		<u>Year</u>	<u>Production</u>
<u>(MT)</u>	<u>Consumption (MT)</u>			
	<u>Status Quo</u>	<u>Nutn. Based</u>		
Costa Rica			87-88	230,000
-0-	-0-			
			88-89	210,000
-0-	-0-			
El Salvador			87-88	580,000
200,000	285,000			
			88-89	580,000
220,000	307,000			
Guatemala			87-88	1,260,000
-0-	64,000			
			88-89	1,290,000
-0-	62,000			
Honduras			87-88	500,000
20,000	120,000			
			88-89	520,000
-0-	92,000			
Panama	Information not available.			

Adapted from: United States Department of Agriculture, World Food Needs and Availabilities, 1987-88, 1987.

Moreover, a survey conducted in 1980 by the U.N. Commission for Latin America showed that Costa Rica, El Salvador, Guatemala and Honduras display a seriously unequal distribution of income ranging from the best case, Guatemala, to the worst, El Salvador (see Table 5).

TABLE 5

Income Distribution in Central America in 1980 (in 1970 U.S. dollars)

<u>Percent</u>	<u>Poorest 20 Percent</u>		<u>Richest 20</u>	
	<u>Average</u>	<u>% of</u>	<u>Average</u>	<u>% of</u>
	<u>Income</u>	<u>Total</u>	<u>Income</u>	<u>Total</u>
Costa Rica	\$177	4%	\$1,165	49%
El Salvador	47	2%	1,536	66%
Guatemala	111	5%	1,133	54%
Honduras	81			
4%            796        59%				
Panama	(Information unavailable)			

Source: IIED, Regional Development Profile

Consequently, alleviation of Central America's hunger and malnutrition problems depends not only on increasing production of basic food crops, but also on increasing the incomes of the rural poor, expanding the availability, and increasing the consumption of, food, and using food assistance to fight hunger and malnutrition in the short run while longer term measures are taken to provide a lasting solution to the problems of hunger and malnutrition in the region.

COSTA RICA

PROGRAM: PL 480 TITLE I

I. Purpose:

A. FY 89-93: To provide the GOCR with balance of payments support, provide local currency for Mission economic stabilization program and give leverage to Mission in its policy dialogue with GOCR on stabilization to stimulate GOCR to carry out basic reforms that support economic growth.

II. Commodities

A. FY 89

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	136,000 MT	\$15,000,000
Total	136,000 MT	\$15,000,000

B. FY 90-93: Program level will remain at \$15,000,000. Wheat will remain the only commodity, unless sufficient wheat can be purchased for less than \$15,000,000. In this case, corn will be imported as well, in quantities sufficient to bring value of total program to \$15,000,000.

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### III. Use of Local Currency

#### A. FY 89

Amount Generated  
(Dollar equivalent)

Uses

\$15,000,000

\$4,500,000 (30%)

Private enterprise  
devt.credit (Section 108)

\$6,000,000 (40%)

Counterpart funds for AID  
and IDB devt. projects:  
-Ag. production, research  
& extension  
-Construction of  
irrigation facilities  
-Rural road construction

\$4,500,000 (30%)

Direct support to  
self-help measures and  
reforms  
-Support to agrarian reform  
-Improvement of grain  
pricing and storage

B. FY 90-93: No change anticipated.

### IV. Self-Help Measures and Policy Reforms

#### A. FY 89

1. Eliminate food pricing subsidies to reduce government deficits.

2. Diversify Costa Rica's agriculturally-based export earnings to markets outside of Central America.

3. Improve basic export infrastructure.

4. Strengthen land tenure security by shifting from collectivization to individual land ownership.

5. Transfer National Production Council services to private sector.

6. Revise policies that encourage inefficient allocation of resources.

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7. Construct/maintain rural roads.

B. FY 90-93: No change.

WORLD FOOD PROGRAM

I. Project Descriptions

A. COS/2524

          Title: Food Support for Community Development in Rural and Suburban areas.

          Summary: Construction or improvement of 3,552 houses through self-help measures. Integrate 96 productive enterprises. Train 5,450 people in housing construction.

          Implementing Agencies: IMAS, MS, MEIC, MIVAH, MIDEPLAN, INA and INFOOCOOP.

          Beneficiaries: 3,552 families with housing problems and where head is un- or underemployed.

          Life of Project: FY 82-89. Possible follow-on project.

          Total WFP Investment in Project: \$1.6 million.

B. COS/2775/Q

          Title: Integration of Refugees into Productive Activities.

          Summary: Initiate the integration into the national economy of 13,000 refugees from El Salvador, Nicaragua and Guatemala in selected rural areas, together with about 2,000 Costa Ricans.

          Implementing Agencies: IMAS, ACNUR, Caritas, Red Cross and other PVOs coordinated by DIGEPARE.

          Beneficiaries: 13,000 refugees and 2,000 Costa Ricans.

          Life of Project: FY 88-91.

          Total WFP Investment in Project: \$1.8 million.

C. COS/2706

          Title: Basic Health Infrastructure for Communal Development in Rural Areas.

          Summary: Improve the socioeconomic conditions for rural population in seven priority rural Cantons.

          Implementing

Agencies: MS, Institute of Aquaducts and Sewers,  
IFAM, various municipalities, coordinated  
by Plan Ministry.  
Beneficiaries: 5,095 families.  
Life of Project: FY89-91.  
Total WFP Investment  
in Project: \$805,000

D. COS/2761

Title: Production of Basic Food Crops by Small  
Farmers  
Summary: Increase, improve and rationalize the  
production of basic grains, especially  
corn and beans, in an area of about 1,600  
hectares.  
Implementing  
Agencies: Ministry of Agriculture, IDA, BNCR, CNP,  
IMAS, coordinated by MIDEPLAN.  
Beneficiaries: 5,500 small farm families.  
Life of Project: FY87-91.  
Total WFP Investment  
in Project: \$1.8 million.

II. Commodities

A. FY 89

1. COS/2524

<u>Commodity</u>	<u>Quantity (MT)</u>
Wheat Flour	4,706
Pulses	565
Vegoil	565
Canned Meat	565
Non-Fat Dry Milk	565
Minestrone Soup	32
Total	6,998

2. COS/2775/Q

<u>Commodity</u>	<u>Quantity (MT)</u>	
Rice	1,230	
Wheat Flour	210	
Non-Fat Dry Milk		330
Pulses	63	
Canned Fish	164	
Canned Meat	82	
Vegoil	246	
Total	2,325	

3. COS/2706

<u>Commodity</u>		<u>Quantity (MT)</u>
Wheat Flour	554	
Pulses		111
Canned Meat/Fish		111
Vegoil		111
Non-Fat Dry Milk		111
Total		998

4. COS/2761

<u>Commodity</u>		<u>Quantity (MT)</u>
Wheat Flour	2,063	
Pulses		248
Canned Meat	248	
Vegoil		248
Non-Fat Dry Milk		206
Total		3,013

5. Combined

<u>Commodity</u>		<u>Quantity (MT)</u>
Wheat Flour	7,533	
Rice		1,230
Pulses		987
Canned Meat	895	
Canned Fish	164	
Canned Meat/Fish		111
Minestrone Soup		32
Vegoil		1,170
Non-Fat Dry Milk		1,212
Total		13,334

B. FY 90-93

Projects are expected to continue at FY 89 levels at least until PACD indicated.

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EL SALVADOR

PROGRAM: PL 480 TITLE II

I. Program Purpose

A. FY 89

1. To provide continuing support to nutritionally at-risk population groups whose well-being has worsened because of unstable political and economic circumstances.

B. FY 90-93: No change anticipated.

II. Program Description

A. FY 89

1. Maternal-Child Health (MCH) Program

Operates throughout country. CRS is PVO cooperating sponsor. Beneficiaries: 130,000

2. Other Child Feeding (OCF) Program

Operates throughout country. Targets orphanages and other institutions. CRS is PVO cooperating sponsor. Beneficiaries: 5,000.

3. Food for Work (FFW) Program

Government to Government, through the Directorate of Community Development (DIDECO). Targets marginal urban dwellers. Purpose is to encourage income generating activities and build needed infrastructure. Beneficiaries: 82,500.

4. Support to Armed Forces Civic Action Program

Government to Government, through the National Commission for Area Restoration (CONARA). Purpose is to improve image of armed forces through their carrying out civic action programs, such as food and medicine distribution, the provision of health care and similar activities. Food is distributed mostly through Food for Work projects. Beneficiaries: 52,500.

B. FY 90-93: Programs will probably be reduced, depending on the political situation.



III. Commodities

A. FY 89

1. MCH

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Cornmeal	2,944	\$ 471,100
Rice	2,224	411,500
Rolled Oats	2,224	642,700
Vegoil	736	499,800
Non-Fat Dry Milk	1,560	171,700
Total	9,688	\$2,196,800

2. OCF

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Cornmeal	136	\$ 21,800
Rice	103	19,100
Rolled Oats	103	29,800
Vegoil	34	23,100
Non-Fat Dry Milk	69	7,600
Total	445	\$101,400

3. FFW (DIDECO)

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Corn	7,200	\$669,600
Rice	3,600	656,000
Vegoil	900	611,100
Non-Fat Dry Milk	1,080	118,800
Total	12,780	\$2,055,500

4. CONARA

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Corn	2,519	\$214,100
Rice	1,260	233,100
Vegoil	315	129,800
Non-Fat Dry Milk	380	41,800
Total	4,474	\$618,800

5. Combined

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Corn	9,719	\$883,700
Cornmeal	3,080	492,900
Rice	7,187	1,319,700
Rolled Oats	2,327	672,500
Vegoil	1,985	1,263,800
Non-Fat Dry Milk	3,089	339,900
Total	27,387	\$4,972,500

B. FY 90-93

May be some reduction in these levels.

IV. Non-Food Support

A. FY 89

1. DA Funds

<u>Recipient</u>	<u>Amount</u>	<u>Use</u>
CESAD	\$6,000,000	Admin. (60%) and project enrichment costs.

2. PL 480 Title I Local Currency Generations

<u>Recipient</u>	<u>Amount</u>	<u>Use</u>
CONADES/DIDECO	\$2,500,000	Operating funds for FFW activities.

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### 3. Other Non-Food Support

#### Staff

One (1) USDH Full-Time Food for Peace Officer  
One (1) FSN Full-Time Assistant

#### Institutional Contractors

Firm: OCA  
Level of Effort: 10 professionals  
Task: Help improve Title II program monitoring

Firm: Krauss International  
Level of Effort: 10 professionals  
Task: TA to the National Displaced Persons Committee (CONADES) and DIDECO to help improve food aid delivery to displaced people.

B. FY 90-93

Political situation makes it unclear what changes will occur in non-food inputs. Staffing within Mission will probably remain unchanged. Continuation of institutional contracts beyond FY 89 is uncertain.

PROGRAM: PL 480 TITLE I

#### I. Purpose

A. FY 89: To provide balance of payments support, supply essential food imports, and keep essential social services and private sector activities operating.

B. FY 90-93: No change anticipated unless political situation changes.

#### II. Commodities

A. FY 89

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	130,000 MT	\$17,000,000
Vegetable Oil	18,000 MT	9,000,000
Edible Tallow	38,000 MT	15,000,000
Total	186,000	\$41,000,000

B. FY 90-93

Probably the same commodities in amounts whose value would vary between \$35 and \$45 million. Other grains may be added depending on harvest in any given year.

III. Use of Local Currency

A. FY 89

Amount Generated  
(Dollar equivalent)

Uses

\$41,000,000

(Amts. not yet available)

Counterpart funding  
to DA-funded  
projects such as:

Water Management  
Agrarian Reform Financing  
Health System Support  
Judicial Reform  
Industrial Stabilization  
Educational Revitalization  
Earthquake Reconstruction  
CONADES/DIDECO FFW Activities

B. FY 90-93: Similar uses but projects not yet identified.

IV. Self-Help Measures and Policy Reforms

A. FY 89

1. Adopt new incentives for private sector investment in agribusiness.

2. Improve procedures for processing agricultural credit and strengthen the Agricultural Development Bank.

3. Adopt measures to encourage production and diversification of non-traditional export crops.

4. Adopt measures to complete/consolidate Phases I and III of agrarian reform.

5. Take measures to stop introduction and spread of exotic diseases to El Salvador livestock herds.

6. Adopt measures to determine existence of pests that affect fruit and vegetable crops.

7. Adopt measures to improve storage conditions for agricultural imports.

8. Design, implement and evaluate GOES immunization services and expand immunization services in rural and urban areas through improved primary health care services.

B. FY 90-93: Depends on country's political situation.

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WORLD FOOD PROGRAM

1. Project Descriptions

A. ELS/2317

Title: Nutritional Education and Supplementary Feeding  
for At-Risk Groups  
Summary: To improve the nutritional status of pregnant and  
lactating mothers and preschool-age children  
through both food assistance and nutrition  
education.

Implementing

Agencies: Ministry of Health

Beneficiaries: 220,000

Life of Project: FY 85-88 with probable extension  
to FY 89.

Total WFP

Investment

in Project: \$12.3 million

B. ELS/2690

Title: School Feeding Program  
Summary: To provide meal to primary school children.

Implementing

Agencies: Ministry of Education

Beneficiaries: 400,000

Life of Project: FY84-89

Total WFP

Investment

in Project: \$10.5 million

C. ELS/2725

Title: Rural Housing and Community Infrastructure  
Summary: Food for Work projects in areas where agrarian  
reform is taking place.

Implementing

Agencies: Ministry of Public Works

Beneficiaries: 250,000

Life of Project: FY 86-91

Total WFP

Investment

in Project: \$3.9 million

D. ELS/2806

Title: Displaced Persons Rehabilitation Assistance  
Summary: Food for Work projects to enhance income  
generating skills among displaced population.  
Implementing  
Agencies: National Committee for Assistance to the  
Displaced (CONADES)  
Beneficiaries: 120,000  
Life of Project: FY 87-89  
Total WFP  
Investment  
in Project: \$3.9 million

E. ELS/3097

Title: Soil Conservation and Agroforestry Activities  
Summary: Food for Work activities in Western Region of El  
Salvador.  
Implementing  
Agencies: Ministry of Agriculture  
Beneficiaries: 54,000  
Life of Project: FY 88-93  
Total WFP  
Investment  
in Project: \$5.5 million

F. ELS/3340

Title: Rehabilitation of Basic Infrastructure and  
Agricultural Diversification  
Summary: Food for Work activities for displaced population.  
Implementing  
Agencies: CONADES  
Beneficiaries: 94,000  
Life of Project: FY 88-92  
Total WFP  
Investment  
in Project: Not yet determined.

## II. Commodities

### A. FY 89

1. ELS/2317: 7,495 MT
2. ELS/2690: 2,394 MT
3. ELS/2725: 1,506 MT
4. ELS/2806: 4,230 MT
5. ELS/3097: 2,750 MT
6. ELS/3340: 5,250 MT

Total: 23,625 MT

Note: Individual commodity quantities unavailable.

### B. FY 90-93

Projects will continue at least until PACD indicated.  
Continuation past that point is uncertain.



GUATEMALA

PROGRAM: PL 480 TITLE II

I. Program Purpose

A. FY 89

1. To support GOG and USAID initiatives to improve nutrition standards and reduce hunger.

B. FY 90-93: No change anticipated.

II. Program Description

A. FY 89

1. Maternal-Child Health (MCH) Program

Operates throughout country. CARE and CRS are PVO cooperating sponsors. Beneficiaries: 365,000 (297,000 CARE; 68,000 CRS).

2. Other Child Feeding (OCF) Program

Operates throughout country. Targets orphanages and other institutions. CARE and CRS are PVO cooperating sponsors. Beneficiaries: 21,700 (18,100 CARE; 3,600 CRS).

3. Food for Work (FFW) Program

Operates throughout country except for north (Peten and parts of Verapaz departments). CARE and CRS are PVO cooperating sponsors. Community development projects implemented: roads, bridges, schools, reforestation, soil conservation. One special FFW program for residents of marginal areas of Guatemala City and other secondary cities. Beneficiaries: 178,500 (166,500 CARE, including 154,500 in marginal areas program; 12,000 CRS).

B. FY 90-93: Probably same levels, except for marginal areas program, which may be expanded over period to more secondary cities if successful.

### III. Commodities

#### A. FY 89

<u>1. MCH</u> <u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Soy Fortified Bulgur	4,818	\$ 934,700
Cornmeal	4,448	698,300
Corn	850	77,400
Wheat Flour	370	63,600
Vegoil	1,974	1,296,900
Non-Fat Dry Milk	5,298	582,800
Total	17,758	\$3,653,700

#### 2. OCF

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Soy Fortified Bulgur	335	\$ 65,000
Cornmeal	296	46,500
Corn	78	7,100
Wheat Flour	39	6,700
Vegoil	117	76,800
Non-Fat Dry Milk	374	41,200
Total	1,239	\$ 243,300

#### 3. FFW

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Soy Fortified Bulgur	131	\$ 25,400
Corn	1,736	158,000
Rice	1,937	347,800
Wheat Flour	536	92,200
Beans	875	407,800
Vegoil	67	44,000
Total	5,282	\$1,075,200

4. Combined

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value</u>
Soy Fortified Bulgur	5,284	\$1,025,100
Cornmeal	4,744	744,800
Corn	2,664	242,500
Rice	1,937	347,800
Wheat Flour	945	162,500
Beans	875	407,800
Vegoil	2,158	\$1,417,700
Non-Fat Dry Milk	5,672	624,000
Total	24,279	\$4,972,200

B. FY 90-93

No major change anticipated, unless evaluation scheduled for 2nd quarter of FY 88 indicates otherwise.

IV. Non-Food Support

A. FY 89

Staff

One (1) PSC Full-Time Title II Program Manager  
One (1) FSN Full-Time Assistant  
One (1) USDH Deputy Program Officer (5% of time).

PL 480 Title I Local Currency Proceeds

\$3-4,000,000 to PVOs to cover administrative and program enrichment costs.

B. FY 90-93

No change anticipated, except possible centrally-funded Outreach Grant to CARE. Details not yet available.

PROGRAM: PL 480 TITLE I

I. Purpose

A. FY 89: To help advance Mission agricultural sector program, which will include policy dialogue and specific development projects designed to lead to increased agricultural production and a strengthened private sector participating in development.

B. FY 90-93: No change anticipated.

II. Commodities

A. FY 89

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	135,000 MT	\$18,000,000
Vegoil	15,000 MT	8,000,000
Total	150,000 MT	\$26,000,000

B. FY 90

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	139,320 MT	\$18,576,000
Vegoil	15,000 MT	8,000,000
Total	150,320 MT	\$26,576,000

C. FY 91

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	143,780 MT	\$19,171,000
Vegoil	15,000 MT	8,000,000
Total	158,780 MT	\$27,171,000

D. FY 92

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	148,380 MT	\$19,784,000
Vegoil	15,000 MT	8,000,000
Total	163,380 MT	\$27,784,000

E. FY 93

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	153,128 MT	\$20,417,000
Vegoil	15,000 MT	8,000,000
Total	168,128 MT	\$28,417,000

### III. Use of Local Currency

A. FY 89-93

Amount Generated  
(Dollar equivalent)

Uses

Equal to value of commodities  
each year.

25% of total

Development activities through  
private sector (Section 108)

8% of total

Animal and plant health

67% of total

Along with ESF and DA funds,  
support to specific activities  
in areas where impact is  
likely to be greatest, as part  
of planned agriculture sector  
program. Activities may  
include:

-- Small scale irrigation;

-- Soil Conservation;

- Marketing;
- Agricultural research;
- Agricultural credit (public and private);
- Watershed management.

#### IV. Self-Help Measures and Policy Reforms

##### A. FY 89-93

Agriculture sector program will include a policy agenda aimed at accelerating progress toward defined rural development goals. Title I self-help measures and policy reforms may include:

1. An appraisal of the overall role of government in the agricultural sector and the potential for an increased private sector role.
2. Changes in taxation, government spending, agricultural credit, inflation control, etc. policies.
3. Changes in trade policy, including the regulation of imports, exports and internal trade.
4. Institutional changes in the Ministry of Agriculture.

A team of consultants will assist USAID in defining specific policy agenda, some parts of which will be expressed as self-help measures to be included in Title I agreements during FY 89-93.

PROGRAM: SECTION 416 DONATION

PVO Cooperating Sponsor: SHARE

The future of this program is uncertain. Main office of SHARE in the United States has requested a PL 480 Title II program beginning FY 89. Commodities requested:

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<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Value</u>
Corn	1,331	\$121,200
Rice	688	123,500
Beans	716	333,800
Vegoil	188	123,300
Corn Soy Milk	157	40,700
Wheat Flour	383	65,900
Total	3,463	\$808,400

Details on beneficiaries and types of programs are as yet unavailable.

WORLD FOOD PROGRAM

I. Project Descriptions

A. GUA/2547

Title:	Agricultural Development in the Northern Transversal Region.
Summary:	To improve the socioeconomic conditions of farmers located in the area and encourage crop diversification from subsistence to exportable perennial crops.
Implementing Agencies:	General Directorate for Agricultural Services/National Reconstruction Committee.
Beneficiaries:	10,000
Life of Project:	FY 89 is final year.
Total WFP Investment in Project:	\$2.1 million.

B. GUA/2581

Title: Training of Women for Community Development  
Summary: To promote a sense of cooperation among women in collective labor and support the organization and operation of work groups; train women in rural communities to carry out productive, income-generating activities.

Implementing Agencies: Ministry of Urban and Rural Development.  
Beneficiaries: 25,000  
Life of Project: FY 89 is final year.  
Total WFP Investment in Project: \$5.8 million.

C. GUA/2587

Title: Small Farmer Production of Basic Food Crops.  
Summary: To contribute to the improvement of the socioeconomic conditions of small farmers in the Altiplano, increase the production of basic grains and promote vegetable crops.

Implementing Agencies: General Directorate of Agricultural Services/National Reconstruction Committee.  
Beneficiaries: 30,000  
Life of Project: FY 89 is final year.  
Total WFP Investment in Project: \$5.8 million.

D. GUA/2705 Exp.

Title: Nutrition Education and Supplementary Feeding for At-Risk Groups and Primary School Students  
Summary: To prevent the effects of malnutrition, especially among at-risk, low-income groups (mothers-children), and expand and improve pre-primary and primary education through a feeding program.

Implementing Agencies: National Reconstruction Committee (coordinating entity)/Social Welfare Secretariat/Public Health Ministry/Education Ministry.



Beneficiaries: 650,000 primary school students, 80,000 mothers and preschool age children

Life of Project: FY 89-90.

Total WFP Investment in Project: \$23 million

E. GUA/3065

Title: Community Development

Summary: To motivate and assist rural communities with scarce resources to undertake environmental sanitation and community development activities so as to raise their standard of living.

Implementing Agencies: Health and Rural Development for Cooperation/National Reconstruction Committee.

Beneficiaries: 300,000 over life of project. Includes worker and four dependents.

Life of Project: FY 89-91

Total WFP Investment in Project: \$14 million.

II. Commodities

A. FY 89

1. GUA/2547

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn	950
Wheat Flour	450
Pulses	140
Canned Meat/Fish	140
Vegoil	140
Non-Fat Dry Milk	180
Total	2,000

2. GUA/2581

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn	950
Wheat Flour	450
Pulses	140
Canned Meat/Fish	140
Vegoil	140
Non-Fat Dry Milk	180
Total	2,000

3. GUA/2587

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn	1,045
Wheat Flour	495
Pulses	154
Canned Meat/Fish	154
Vegoil	154
Non-Fat Dry Milk	198
Total	2,200

4. GUA/2705 Exp.

<u>Commodity</u>	<u>Quantity (MT)</u>
Rolled Oats	2,460
Corn	7,800
Rice	360
Wheat Flour	900
Pulses	1,500
Edible Fat	700
Canned Meat/Fish	150
Minestrone Soup	45
Vegoil	2,000
Non-Fat Dry Milk	1,920
Total	17,835

5. GUA/3065

<u>Commodity</u>		<u>Quantity (MT)</u>
Corn		4,520
Wheat Flour	2,260	
Pulses		700
Canned Meat/Fish	700	
Vegoil		450
Non-Fat Dry Milk	450	
Total		9,080

6. Combined

<u>Commodity</u>		<u>Quantity (MT)</u>
Corn		15,265
Rolled Oats	2,460	
Wheat Flour	4,555	
Rice		360
Pulses		2,634
Canned Meat/Fish	1,284	
Edible Fat	700	
Minestrone Soup	45	
Vegoil		2,884
Non-Fat Dry Milk	2,928	
Total		33,115

B. FY 90-93

As stated, projects 2547, 2581 and 2587 are scheduled to end in FY 89, project 2705 exp. in FY 90 and project 3065 in FY 91. However, WFP may continue all or some of the above beyond their PACDs to FY 90 and 91, depending on GOG food aid policy. The latter may call for a reduction in donated food aid during that time. If so, WFP will reduce programs, but cannot at this time specify which.

HONDURAS

PROGRAM: PL 480 Title II

I. Program Purpose

A. FY 89

1. Overall Program Purpose: None

2. Individual Program Purposes

a. School Feeding (SFP) Program: To increase primary school enrollment; improve student performance and attendance.

b. Maternal-Child Health (MCH) Program: To combat malnutrition in pre-school-age children and improve the nutritional status of pregnant women.

B. FY 90-93: No change anticipated.

II. Program Description

A. FY 89

Both programs operate in 16 of the country's 18 Departments. CARE is the only PVO Cooperating Sponsor. Other entities involved include the GOH's Ministry of Health (MCH), National Welfare Board (MCH) and the Ministry of Education (SFP). Beneficiaries: MCH (Ministry of Health) - 43,000; MCH (National Welfare Board) - 74,000; SFP - 330,000.

B. FY 90-93: No change anticipated.

III. Commodities

A. FY 89

1. MCH (both)

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value (\$000)</u>
Corn Soy Milk	976	\$253,011
Non-Fat Dry Milk	1,685	185,710
Rice	842	151,500
Flour	1,404	241,400
Vegoil	1,178	775,906

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value (\$000)</u>
Oatmeal	444	\$ 117,600
Corn	516	47,000
Total	7,045	\$1,772,127

2. SFP

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value (\$000)</u>
Corn Soy Milk	3,168	\$820,589
Non-Fat Dry Milk	1,320	145,490
Total	4,488	\$966,079

3. Combined

<u>Commodity</u>	<u>Quantity (MT)</u>	<u>Approximate Value (\$000)</u>
CSM	4,144	\$1,073,600
Non-Fat Dry Milk	3,005	331,200
Rice	842	151,500
Flour	1,404	241,400
Vegoil	1,178	775,906
Oatmeal	444	117,600
Corn	516	47,000
Total	11,533	\$2,738,206

B. FY 90-93

No major change in overall dollar level anticipated. CSM may be phased out and replaced by another commodity in SFP. Other ration adjustments are possible.

IV. Non-Food Support

A. FY 89 (estimated)

1. National Budget and Economic Support Funds (dollar value)

<u>Recipient</u>	<u>Amount</u>	<u>Source</u>	<u>Use</u>
Min. of Health	\$165,000	Natl. Budg.	Admin. Costs
	\$165,000	ESF	Admin. Costs

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<u>Recipient</u>	<u>Amount</u>	<u>Source</u>	<u>Use</u>
Min. of Educ.	\$ 90,000	Natl. Budg.	Admin. Costs
	20,000	ESF	Admin. Costs
Natl. Welf. Bd.	\$400,000	ESF	Admin. Costs
CARE	\$832,500	ESF	Admin. Costs

2. Other Non-Food Support

Staff

One (1) FSN Full-Time: Program Manager  
 One (1) USDH Part-Time (10%): Division Chief

B. FY 90-93

Amounts available under ESF and national budget may decrease. Other types of funding uncertain. No staff changes are anticipated.

PROGRAM: PL 480 TITLE I

I. Purpose

A. FY 89: To provide a steady supply of basic food to the Honduran people.

B. FY 90-93: No change anticipated.

II. Commodities

A. FY 89

<u>Commodity</u>	<u>Quantity</u>	<u>Value</u>
Wheat	\$82,000 MT	\$ 9,000,000
Inedible Tallow	5,000 MT	2,000,000
Total	\$87,000 MT	\$11,000,000

B. FY 90-93: No change anticipated in value of commodities, although corn may added if wheat and tallow prices fall drastically.

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III. Use of Local Currency

A. FY 89

Amount Generated  
(Dollar equivalent)

Uses

\$11,000,000

\$9,000,000

Allocated to Agriculture sector through Ministry of Natural Resources. Specific activities not yet specified.

\$2,000,000

Allocated to the Ministry of Plan and Budget and other development ministries for development activities. Specific activities not yet specified.

B. FY 90-93: May be change in above proportions, but most funds will probably still be allocated to the Agriculture sector. GOH and USAID contemplating Title I/III program beginning FY 90. Nature of this program not yet defined, but will include specific development activities.

#### IV. Self-Help Measures and Policy Reforms

##### A. FY 89

1. Implement fruit fly control measures.
2. Privatize certain aspects of GOH role in basic grain purchasing, storage and pricing.
3. Extend agricultural research.
4. Develop comprehensive food aid policy.

B. FY 90-93: No major change until Title I/III program is developed.

#### PROGRAM: WORLD FOOD PROGRAM

##### I. Program Description

##### A. HOND/7181-2

Title:	Construction of Basic Infrastructure and Promotion of Productive Activities in Rural and Suburban Areas
Summary:	Food for Work type projects to help construct needed infrastructure and assist targetted population in acquiring income-generating skills.
Implementing Agencies:	Ministry of Public Works, Office of the Mayor of Tegucigalpa, National Welfare Board, National Professional Training Institute
Beneficiaries:	23,000
Life of Project:	FY 86-89. Will probably be extended through FY 91.
Total WFP Investment in Project:	\$6.6 million.



B. HOND/2742

Title: Forestry Development  
Summary: Food for Work type projects to slow the deterioration of the country's forests.  
  
Implementing  
Agencies: Honduran Forestry Development Corporation  
Beneficiaries: 60,000  
Life of Project: FY 85-89. Will probably be extended through FY 90 with beneficiaries increased to 85-90,000 beneficiaries.  
  
Total WFP Investment in Project: \$4.6 million

C. HOND/2283-2

Title: Production of Basic Grains by Organized Farmer Groups  
Summary: Increase the production of basic grains by small farmers.  
  
Implementing  
Agencies: National Agrarian Institute, Ministry of Natural Resources  
Beneficiaries: 70,000 divided into 500 organized groups  
Life of Project: FY 87-90  
Total WFP Investment in Project: \$4.9 million.

D. HOND/2523

Title: Supplementary Feeding for At-Risk Groups and Promotion of Family-Level Productive Activities  
Summary: Maternal-Child Health (MCH) program targeting preschool-age children and pregnant and lactating women. MCH and income-producing activities.  
  
Implementing  
Agencies: Ministry of Health  
Beneficiaries: 7,000  
Life of Project: FY 88-89  
Total WFP Investment in Project: \$5.4 million.

E. HOND/3162

Title: Emergency Food Distribution  
Summary: Distribution of food to Salvadorian,  
Nicaraguan and Guatemalan refugees, some in  
refugee camps and others in Mosquitia.  
  
Implementing  
Agencies: U.N. High Commission for Refugees  
Beneficiaries: 43,000 (30,000 in camps)  
Life of Project: 6 month program that is always renewed. Will  
probably continue through FY 89 at least.  
  
Total WFP Invest-  
ment in Project: \$1.7 million.

II. Commodities

A. FY 89

1. HOND/7181-2

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn	2,620
Wheat	375
Beans	300
Canned Meat/Fish	225
Vegoil	225
Non-Fat Dry Milk	225
Total	3,970

2. HOND/2742

<u>Commodities</u>	<u>Quantity (MT)</u>
Corn	1,485
Beans	170
Canned Meat/Fish	127
Vegoil	127
Non-Fat Dry Milk	127
Total	2,036

3. HOND/2283-2

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<u>Commodities</u>	<u>Quantity (MT)</u>
Corn	2,050
Beans	234
Canned Meat/Fish	176
Vegoil	176
Non-Fat Dry Milk	176
Total	2,812

4. HOND/2523

<u>Commodities</u>	<u>Quantity (MT)</u>
Corn	2,380
Beans	476
Vegoil	381
Non-Fat Dry Milk	476
Total	3,713

5. HOND/3162

<u>Commodities</u>	<u>Quantity (MT)</u>
Corn	3,558
Rice	1,980
Beans	1,078
Vegoil	662
Non-Fat Dry Milk	662
Total	7,940

6. Combined

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn	12,093
Wheat	375
Rice	1,980
Beans	2,258
Canned Meat/ Fish	528
Vegoil	1,571
Non-Fat Dry Milk	1,666
Total	20,471

B. FY 90

1. HOND/7181-2

Same commodities and quantities as above.

2. HOND/2742

<u>Commodities</u>	<u>Quantity (MT)</u>
Corn	2,189
Beans	250
Canned Meat/Fish	187
Vegoil	187
Non-Fat Dry Milk	187
Total	3,000

3. HOND/2283-2

Same commodities and quantities as above.

4. HOND/2523

If extended, same commodities and quantities as above.

5. HOND/3162

If extended, same commodities and quantities as above.

C. FY 91-93

Unclear. Will depend on result of current talks between CARE, CRS, COHAAT, WFP and the Ministry of Plan on the future of food aid in Honduras. Result should be known in December 1987. WFP believes that their total commodity level will probably not fall below FY 90 levels, no matter how the talks conclude.

PANAMA

WORLD FOOD PROGRAM

I. Project Descriptions

A. PAN/2796

Title:	Food Production and Community Development in Marginal Areas through Aquaculture
Summary:	Generate food self-sufficiency and support execution of road and environmental health infrastructure works and cooperative organization.
Implementing Agencies:	Agricultural Devt. Ministry (MIDA)
Life of Project:	FY 86-90
Beneficiaries:	2,600 families (Herrera Province)
Total WFP Investment in Project:	\$1.3 million

B. PAN/2436 Exp.

Title:	Rural Development to Rehabilitate Indigenous Communities
Summary:	Help generate permanent employment for 7,000 families through agroforestry-related productive activities, and support community infrastructure and cooperative organization.
Implementing Agencies:	Ministry of Plan and Economics, Institute of Renewable Resources, National Integrated Rural Devt. Office.
Beneficiaries:	7,000 families.
Life of Project:	FY 88-91
Total WFP Investment in Project:	\$1.6 million.

## II. Commodities

### A. FY 89

#### 1. PAN/2796

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn or Rice	338
Pulses	34
Canned Meat/Fish	34
Vegoil	34
Non-Fat Dry Milk	34
Total	474

#### 2. PAN/2436

<u>Commodity</u>	<u>Quantity (MT)</u>
Corn	500
Wheat Flour	250
Pulses	100
Canned Fish	50
Vegoil	75
Non-Fat Dry Milk	30
Total	1,005

#### 3. Combined

Corn or Rice	338
Corn	500
Wheat Flour	250
Pulses	134
Canned Meat/Fish	34
Canned Fish	50
Vegoil	109
Non-Fat Dry Milk	64
Total	1,479

### B. FY 90-93

Projects are expected to continue at least until PACD indicated.

TECHNICAL SUPPORT FOR FOOD ASSISTANCE PROGRAMS

Food Assistance in the 1990s

The Central American countries and Panama (CA/P) have received considerable amounts of food assistance from the United States Government and other donors over the years. \$138.6 million in commodities were planned for importation into these countries in FY 87 in PL 480 Title I/III and Title II programs (USAID-PVO, USAID-Host Country Government) and through the World Food Program (WFP) and \$153.9 million in commodities are planned for importation into CA/P countries in FY 88 under these same programs.\* These commodities have been, or will be, used for emergency feeding, regular feeding programs (Maternal-Child Health, School Feeding, Food for Work), to provide balance of payments support, to ensure a dependable food supply to a particular country, to generate local currency for development activities or a combination of these purposes. Additionally, over \$32 million in commodities were provided to countries in FY 87 under Section 416 programs in compensation for reductions in country sugar import quotas into the United States under the Sugar Quota Offset Program. For the period FY 89-93, the USG and WFP plan to import approximately 3.4 million Metric Tons (MT) of commodities worth almost \$668 million for the same types of programs (see Table 1).

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\*Planned as of November 1987

FY 87: PL 480 Title I/III: \$89.0 million	Title II: \$10.5 million
WFP: \$39.1 million.	
FY 88: PL 480 Title I/III: \$80.0 million	Title II: \$29.5 million
WFP: \$44.4 million.	

TABLE 1

Planned USG and WFP Food Aid Levels for FY 89-93 (as of Nov. 1987)  
(Dollars and Metric Tons of Food)

<u>Country</u>	<u>USAID PL 480</u>	<u>World Food Program</u>		
	<u>Total</u>	<u>Title I/III</u>	<u>Title II</u>	
Costa Rica				
- U.S.\$ (000)	75,000	-----	4,027	79,027
- Food (MT)	680,000	-----	21,698	701,698
El Salvador				
- U.S.\$ (000)	205,000	20,363	71,896	297,259
- Food (MT)	930,000	112,187	23,797	1,065,984
Guatemala				
- U.S.\$ (000)	135,948	24,870	32,926	193,744
- Food (MT)	790,608	120,279	161,115	1,072,002
Honduras				
- U.S.\$ (000)	56,000	13,722	25,189	94,911
- Food (MT)	435,000	57,533	106,092	598,625
Panama				
- U.S.\$ (000)	-----	-----	2,900	2,900
- Food (MT)	-----	-----	2,964	2,964
Totals				
- U.S.\$ (000)	471,948	58,955	136,938	667,841
- Food (MT)	2,835,608	289,999	315,666	3,441,273

NOTE: U.S.\$ figures represent value of food only for PL 480, and value of food plus other project inputs for WFP.

This volume of food aid is being planned at the same time as both donor organizations and donor and recipient countries are becoming increasingly concerned about broader food-related issues and the role of food assistance in overall country development efforts. Two major issues stand out.



One is the need for CA/P countries to stabilize their economies and, as stated in the FY 88 Congressional Presentation, "to lay the groundwork for sustained economic recovery over the long run, with a wider sharing of the benefits of growth." Nearly all the CA/P countries are undertaking economic reform and structural adjustment programs for this purpose. Such programs include increasing incentives to small farmers, changing tax policies, streamlining tax administration, altering agricultural subsidy and pricing policies, privatizing certain activities carried out by governments, modifying trade policy, encouraging the private sector, diversifying crops and making other changes that disrupt the way people live for a time. The impact of such changes on the poor tends to be particularly great. For example, such adjustments are likely to cause the prices of basic foods to fluctuate greatly. People of limited incomes are also likely to see their purchasing power fluctuate. At such times, targeted direct food assistance to the most affected cushions the effect of such economic adjustments until basic food prices stabilize and purchasing power improves.

Another issue of great importance to CA/P countries is food security, or a country's ability to ensure that its population receives a dependable supply of all the food it needs to lead a health, active life. Government planners and regional institutions, especially the Nutrition Institute for Central America and Panama (INCAP), are discussing the merits of national food security strategies that emphasize self-sufficiency, trade dependence or self-reliance. Food security has been discussed at many gatherings over the last few years in Latin America and elsewhere. Delegates from CA/P countries and INCAP have been active participants. As a result, CA/P countries, with the assistance of INCAP through the ROCAP-funded Technical Support for Food Assistance Programs Project (596-0116) and other food and nutrition planning efforts, are attempting to plan food assistance within a food security framework so that it does not become a disincentive to domestic production, disrupt food prices drastically or discourage the marketing of domestic products. Such efforts have been assisted by increasingly exact measures of food deficits, minimum daily nutritional requirements and family purchasing power. Consequently, CA/P countries will be scrutinizing food assistance carefully during the period FY 89-93 to ensure that it does not overfill measured food deficits, include inappropriate commodities or otherwise cause disincentives to local production or marketing, but rather meets real food needs in the short run while contributing to both food security and overall development goals.

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INCAP and Technical Assistance for Food Assistance Programs

These issues have complex implications for food assistance programs of all types. Therefore, designers and managers of such programs should have assistance in designing and implementing appropriate, well-targeted programs. Assistance will also be needed in conducting food needs assessments, disincentive analyses, and other studies and surveys needed to ensure that food aid resources are meeting needs with a minimum of disincentives and maximum integration into national development and food security plans.

However, as of November 1987, food program-related technical assistance planned or requested by USAIDs for FY 89-93 is limited. \$13-\$14 million in DA, Title I, ESF and national government funds have been either planned or requested for each year. However, nearly all of the funds would be used to support food program operating expenses. The only planned technical assistance is 240 person-months per year for El Salvador, involving two 10-person teams from the Contracting Corporation of America and Krauss International, who are assisting two GOES agencies

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to improve food aid program monitoring and help improve food aid delivery to displaced persons. Even this assistance is uncertain because of the country's political situation. No technical assistance to Title I or III programs has yet been requested or planned. Apart from possible centrally-funded grants to PVOs, some of which could be used for technical assistance, no other USAID or PVO supported technical assistance for food aid programs has been planned for FY 89-93.

The Technical Support for Food Assistance Programs Project, with authorized LOP funding of \$6.1 million, implemented by INCAP, was initiated in FY 85. Its purpose has been to improve the effectiveness of food donation program activities (Title II, WFP, national, other donor) in the CA/P region. It is achieving this purpose by helping to establish national coordination mechanisms and strengthening the technical, managerial and evaluation capabilities of INCAP and public and private agencies. Although the FACD is December 31, 1990, INCAP has already established itself as the major source of technical assistance in the region for food donation programs. In addition, it has established itself as a leader in assisting CA/P countries in addressing food security issues. As a result of Project-related activities, Costa Rica, Guatemala, El Salvador, Honduras and Panama are well on their way to establishing national strategies for using donated food aid and integrating such food aid into overall development plans. Regional and national seminars, as well as ad-hoc work groups, on specific themes have been held, which have sensitized ministerial level decision makers and food aid planners and managers to the need to coordinate the use of food assistance resources to combat malnutrition and hunger more effectively. Various training events, such as regional and national courses and workshops, have upgraded the managerial and planning skills of national food assistance program staff. In addition, hundreds of hours of technical assistance have been given to individual countries through the project to help improve the planning and use of national and donated food aid. Through the project's information dissemination component, over 700 titles of food assistance materials have been catalogued, users throughout the region have been identified, food assistance information centers established, and technical and audio-visual materials on food security and food assistance have been prepared and distributed throughout the region. Finally, the initial phase of one major operations research project, in Costa Rica, is nearing completion and similar operations and applied research activities are being designed. Its experience in this project has allowed INCAP to gain valuable experience in helping countries improve the planning and management of donated and national food assistance programs, and gain a reputation in the area that has earned it an invitation by the prestigious Regional Agricultural Cooperation Council (CORECA) to participate in CORECA's food security activities.

Consequently, INCAP is ideally placed to remain the major source of technical assistance for CA/P food assistance programs. It is also seen as a major source of assistance to countries in planning the use of food assistance within a food security framework. Although INCAP's focus has been targetted food aid through School Feeding, Maternal-Child Health and Food for Work programs under the Technical Support for Food Assistance Programs Project, it has recently been asked by the Government of Honduras and USAID/Honduras to assist in planning the use of all types of food assistance, including food aid imports under concessional sales programs, such as PL 480 Titles I and III. Individual representatives of other governments have expressed interest in such assistance as well. Consequently, such requests, coupled with the reputation of INCAP, suggest a continuing role for INCAP in assisting countries and USAID Missions in improving the use of all types of food assistance well past the PACD of the Technical Support for Food Assistance Programs Project.

As a result, INCAP should be supported by ROCAP in assisting both national governments and USAID and other donor missions in strengthening the overall planning, and improving the use, of food assistance resources. This would include at least the following for all types of food assistance from all international donors and national sources:

- Assistance in carrying out food needs assessments, monitoring and surveillance to determine where food deficits are occurring, both geographically and among socioeconomic groups;

- Assistance in carrying out the disincentive analyses required by the USG for all food programs; and

- Assistance in coordination of food assistance resources to meet overall country development goals and objectives, and to improve national and household food security;

- Assistance in improving the management of all types of food assistance programs, including concessional sales programs.

- Assistance in the analysis and evaluation of policies and national development programs for their effect on household food security and wellbeing.

Already, INCAP staff have been trained in the AID/FVA food needs assessment methodology, and have received materials in Spanish on disincentive analyses and Bellmon determinations. Through ROCAP's Cooperative Agreement with Planning Assistance, INCAP will receive additional materials and training that will enable it to carry out the technical assistance activities listed above.

For these reasons, ROCAP plans to support follow-up activities to the Technical Support for Food Assistance Programs Project (596-0116) until FY 93.

#### Follow-Up Support to Food Assistance Programs

After the PACD for the Technical Support for Food Assistance Programs Project, ROCAP envisages a single project with two major elements. One is direct support to INCAP to provide certain technical, advisory and consultative services to national government and multilateral agencies with which it has established close working relationships. The other element would consist of support to one or more consulting firms to provide the same types of services to USAID Missions and PVOs. The two elements would complement each other. INCAP and the consulting firm or firms would each offer services that they can provide most effectively to agencies and organizations with whom they work best. For example, INCAP has considerable experience in areas such as food and nutrition research, analyzing and compiling food and nutrition data, in-country and regional-level technical training and assisting governments in developing food aid policies and strategies. It also has extensive knowledge about political currents and broad regional economic concerns. Such experience and knowledge makes INCAP best able to assist governments and donor agencies in carrying out, for example, food program-related operations and applied research, food needs assessments, disincentive analyses, training activities and policy dialogue. The consulting firm or firms would assist INCAP, USAID Missions and PVOs in carrying out other activities, to be defined as the new Project is designed.

There would be two funding mechanisms. A certain amount would be authorized and obligated for specific activities to be carried out by INCAP and the consulting firm or firms. The specific activities would probably include policy analysis and evaluation, food needs assessments, and similar macro-level analyses. Another amount would be authorized and made available for buy-ins by USAID Missions for program improvement-oriented activities that arise during the LOP, such as, for example, evaluations or particular types of national-level training courses. Buy-ins could be arranged in such a way that for any proposed activity, Missions could purchase the expertise they need for any particular activity from both INCAP and the consulting firm. For example, they could "buy" INCAP's services to carry out the impact part of an evaluation, while asking the consulting firms to carry out the process part in conjunction with it.

In summary, the strategy that ROCAP proposes is to make available the best possible advisory, consultative and technical assistance to all types of food assistance programs. The idea is to ensure that all organizations needing such assistance to improve food program operations, appropriateness and fit within overall development and food security plans will have easy access to such services. By supporting two or more institutions that will have proven their ability to provide such services

and providing two funding mechanisms, the flexibility needed to respond to needs as they arise can be assured. Thus ROCAP can continue to contribute greatly to efforts to ensure that food assistance is used in appropriate and efficient ways as a development resource as part of development and food security strategies formulated and implemented by CA/P countries in the 1990s.

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